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A PARENT'S STUDY OF CHILDREN'S LIES

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I. THE PROBLEM

No problem of parenthood is more insidious or persistent than that of children's lies. Evidence of childish deceit is known to precede speech and in spite of the most arduous endeavor, to remain long after a wholesome moral tone has been established in other phases of social living. It is one of the child's first conflicts with our standards of conduct and the last to be satisfactorily settled. In fact, of some fifty authors who have written on the subject only three maintain that no lie, however heroic, is justifiable, indicating that even in late adult life the moral issue is not without numerous conflicts and compromises. For parents the problem of dealing constructively with children's lies is many sided, subtle and fraught with deep moral significance. It underlies the other childhood sins and is often used as a shield by the child to protect his other vagaries from parental knowledge and supervision.

As soon as the child realizes that others were not present when he did something or that they may not know what is in his mind, he is able consciously to deceive and invariably does so. The first little deceptions are almost too common place to the observing parent to need elaboration. The child takes up a forbidden object and, on being observed, hides or discards it and assumes a delightfully innocent expression. If he is given the option he will unhesitatingly protect himself from punishment by any form of deception that occurs to him. In the exciting experience of living all means are fair that contribute to his happiness. Deception and lying

at this early stage are merely means of gratification without any moral value whatsoever to the child. It is only when the child matures enough to feel the sting of broken confidence between himself and his parent that secrecy of wrong acts takes on a moral significance for him.

A four year old nibbles at the cake on the table but when questioned by her mother quickly denies having touched it. The mother smiles and says she smells cake. The child accepts the information with glee—no secrets here. She can be her happy self. She admits taking several nibbles without reserve or regrets and declares she will never do it again "because we need it for the company and it doesn't look nice all nibbled that way." When asked why she at first denied having nibbled at the cake she replied carelessly, "Oh, I was just joking." In other words, "It didn't amount to anything—I was just trying out a deception on you and it didn't work. It evidently isn't worth much. I feel fine this way."

In all probability if the deception had "worked" she would have felt just as "fine" until sometime when that means led to a break in the common consciousness of the parent and child and then would come the difficult struggle in which even we adults are involved,—shall I deceive or shall I face facts? In any event, whether at four or six years each child meets the issue and it is for us as parents to make those deceits destructive to wholesome living, appear unsatisfactory from the outset.

In order to realize the breadth of the problem it will perhaps be well to summarize the various definitions and synonyms commonly used to express the type of conduct being considered. To lie is to state falsely, or to act for purposes of deception. To deceive is intentionally to mislead. A falsehood is "an intentional statement of untruth designed to mislead another," and "implies strong moral censure and a charge of intention to affect wrongfully the acts, opinions or affections of another." Thus we do not include "conjuring" but rather the meaning of such words as, untruth, equivocate, quibble, dodge, prevaricate, evade, shuffle, mendacity, counterfeit, dissimulate, simulate, feign, fraudulent, hypocrisy, dissemble, romance, fib and fabricate.

All of the above synonyms involve the idea of deceit in varying shades of intensity and therefore do not indicate either the genesis of our problem or the complexity of the moral situation. Back of all intent to deceive lies the abilities of the child in accurate perception, memories, judgment of corresponding values and native suggestibility. This phase of the problem is the genetic or background tissue out of

which the moral values grow. Until a child has developed some judgment of the relative value of the means he is using he will not be greatly impressed by their destructive qualities. Until he perceives the difference between imaginary and real objects he is unable to give a truthful account of any event, and until he can recall that difference, his imperfect memory, and not deceit, is responsible for his incorrect recollection of anything. When five year old Jane tells her cousin she saw a mountain trout six feet long we know that the story involves imperfect judgment of the relative size of a twelve inch mountain trout and a six foot rule, a desire to give effect to her story by imaginative exaggeration which is not clearly differentiated from real facts, and an imperfect ability to recall anything accurately. A careful study of children's lying should include consideration of these abilities and their development in order that the parent may have an intelligent basis for judgment of inaccuracy.

Further the synonyms given all carry with them more or less "strong moral censure" which implies a degree of uniformity of adult opinion and action in regard to deceptive lying which is far from true. No two adults regard any act of deception with the same emotional intensity and hence do not judge it the same. Almost invariably in the instances of lying collected, the writer felt the lie to be grossly wrong when it was likely to affect him adversely but rarely when the blame fell on another. To our Puritan forebears a healthy flight of childish imagination was evidence of blasphemy; to us it is the natural expression of a normal instinct. One mother fearing that her child would develop untruthfulness punished rigorously every expression of inaccuracy. By the time the child was twelve she was found to be hopelessly backward in English composition and devoid of any power for original thought. Several conferences between the mother and the child's teacher finally resulted in a new plan of action. The mother is now doing all she can to repair the damage done by her inflexible rule. Unfortunately even her rigor did not save the child from lying when the intensity of childish fear occasioned a real temptation but rather encouraged it in certain habitual reactions. After considering several such cases one hesitates to agree with the author who holds that a lie never did mankind any good either in past or in future ages. At one stage in man's development we know that perpetuation of the race and even personal existence depended largely upon deceit. The other day a baby boy playing near the table discovered a prune which had fallen to the floor. He grabbed it, rushed from the room, closing the door and

hiding behind it. Safe at last from interruption he devoured seed and all. Upon being followed and questioned regarding the seed, he assumed an expression of blank innocence and spread out his hands to show he did not have it. Upon further questioning he pretended to hunt for the prune. The incident recalled similar ones from Bleek's "Bushman Folk Lore" where the maintenance of individual and group life depended so frequently upon the ingenuity with which the Bushmen deceived the wild animals among whose haunts they lived. Prof. St. John has made a study of "The Genetics of Veracity" in which he indicates the necessity of protective deceptions in animal life, particularly in the less advanced stages where both strength and mental qualities are lower than in those among whom they live. The folk lore of nearly every race bears out the testimony that existence has been aided either, unconsciously, as in lower animal life by protective deceptions, or consciously by the ingenuity of the animal or primitive tribe. Whether we have arrived at the golden age of truth telling is a much mooted question even among the elect. Such studies, however, do indicate that the problem is shot through with complexities of moral value to all parents.

II. Source Material

The two sources of material which seemed worth while for the study were, a collection of instances of children's lies from adults and children and the literature bearing on the subject which is available in the University Library. The latter offered very little except as it suggested the popular viewpoint of the problem. Of some forty-three available discussions of the subject many were superficial dealing humorously or facetiously with the problem. Such titles as, "The Perfect Liar," "The Pleasure of Deception," "The Unlovely Virtue of Truth Telling," "The Tedium of Truth" indicate the attitudes of the authors. Several more serious discussions such as G. S. Hall's "Children's Lies," St. John's, "The Genetics of Veracity," Clayton Hamilton's, "On Telling the Truth," Miss Latham's, "Study of Falsehood" and others offered considerable suggestive material but none of them covered the subject thoroughly nor offered much that would be of practical value to parents. Taken as a whole the discussions supplied the setting of current opinion on the problem and indicated the complexity of moral standards involved.

The collection of instances of lying was acquired from two sources; namely reminiscences offered by college students and friends numbering 294 and instances offered by the boys and

girls of a Junior High School numbering 379. The total number of instances studied was 673.

All of the contributors were told, when requested to relate an instance of lying, that a serious study was being made of the problem and that no names or signatures were desired. Safe from any possibility of discovery they responded, with but few exceptions, without apparent restraint. Of the adults five wrote that they could not recall an instance of lying, but 187 or 64% wrote personal accounts. Of the children fifteen girls and one boy wrote that they could recall no instance of lying, but sixty girls or 36% and 66 boys or 30% gave personal accounts. Thirteen boys misunderstanding the instructions wrote fanciful tales resembling "Arabian Nights" with evident delight. The actual lies range from trivial social excuses to intense moral struggles and even pathological cases. The children's attitude toward the lie related was not directly asked for but was freely given in over half the stories.

The study of instances of lying has been made with two main purposes in mind; first, to determine what emotions, situations and impulsions make children lie and their attitude toward the lie, and second, to determine with some definiteness a standard of morals in regard to lying which may be of value to the average parent facing the difficult problem in the work-a-day world. The number of instances is thought to be large enough to cover the main causes of lying and the children's attitude toward lying. To determine a fairly definite standard of morals in regard to lying out of the confusion of ideals presented in the discussions of the problem we have added a study of the accepted standards of vocational morals, social ethics, religious quibblings, poetic license and the standards of conduct embodied in the world's classic and modern literature.

It is evident that from such limited data and study, no hard and fast rules of conduct could be deduced but rather, general conclusions and helpful suggestions for meeting problems of parenthood.

III. Universality

At first reading the data as a whole impress one with the *Universality* of the experience. The instances range from three years to mature parenthood, appear equally early in either sex and are present in the earliest and latest literature. One might hastily conclude, the liar ye have always with you. The quest of Diogenes is forever hopeless; if it were not for the balance of morals which point forward toward an

ideal of sincerity which is more to be desired than literal truth. G. S. Hall concludes in his study that lying is in all of us and Kirkpatrick in his "Individual in the Making" says that as soon as a child discovers that others do not know what he has thought or done, he is almost sure to try to deceive them when pain or loss of a desired thing may result from truth telling. Six children and one college student related the story of the child who maintained that he or she had never lied, inferring plainly in each instance that such a statement was the "biggest lie of all." Lie all children do, and perhaps must, even the most conscientious. It is for us as parents to admit the fact in regard to our own treasured darlings and meet the problem intelligently lest our children repeat the experience of one college student who wrote that she could recall no instance of lying in childhood, as her parents had been very rigorous regarding literal truth, but that she lied frequently and deliberately now that she was not subject to their constant interfering supervision. It is probable that her parents had made the mistake of quibbling over literal truth and ignored the greater and more lasting virtues of sincerity, sense of fair dealing and consideration for the rights and feelings of others. Another mature student stated that she had yet to meet the person, who upon intimate acquaintance, was not found to lie regarding at least some one phase of living. For instance, one honest soul was scrupulous about the truth except as regard to her health and another as regards to certain family affairs. One would hesitate to call a kindly soul a liar merely because he did not tell a long story regarding his aches and pains or another because she did not prattle her personal affairs when by mere chance your question required these or an evasion of the truth. It is doubtful if one becomes a "Liar" by an occasional lie, or a child by even fairly habitual lying.

All literature is replete with instances of lying. The Bible contains numerous instances. Folk lore from Norseman to Bushman teems with tales of connivings and deceptions. The so-called classics contain no less number and modern fiction is a network of quibblings and deceptions. So thoroughly ingrained in our thinking is the experience that we scarcely stop to think of it unless the facts are pointed out. How often does one hear the expression "No one is perfect" and surely it is doubly true as regards to truth.

IV. Causative Factors

We have grouped the instances of lying under the three main activities of the mind, namely: (1) intellectual deflec-

tions from the truth, (2) emotional impulsions to deceive, and (3) wilful inventions intended to deceive the hearer. There is necessarily considerable over-lapping of the factors involved, so that the grouping has been made by the dominant factor. For instance, Sam told his mother he had been at a friend's house playing when he had really been to the park riding a burro. He was very sore as a result of the ride and so told her he had a stomach ache. In relating it Sam admits he was afraid that he would be punished for running away and he felt that he needed sympathy and care instead of punishment just then. He loved his mother more dearly than ever in his suffering and to chill her warm sympathy with the truth would have been most distressing to him. Besides, to tell mother the truth would involve "tattling" on his sworn friend and would eliminate the possibility for them both of ever being able to go again. So he stuck to his story but each lie necessitated another. It is evident Sam lied first to avoid punishment, then to get sympathy and care and later to sustain his story. In this case to avoid confusion, the instance has been listed under fear of punishment since the later lies rested on the first misrepresentation. The subdivisions under each main head grew out of the study of the instances and were added gradually as new situations suggested them. Space permits of the inclusion of only a few of the instances collected.

1. *Intellectual Deflections.* Under intellectual deflections from the truth have been grouped the childish imagings and exaggerations. There were seventy four instances in this group, or twelve per cent of the total number. With the exception of seven adult exaggerations all the instances occurred before the thirteenth year. They included simple childish romancings or imaginative tales and exaggerations to create a sensation or attract the attention of the hearer. The stories seemed to offer no personal advantage except as they made the teller the center of interest for the moment. One delightful child relates, "I remember that when I was a child I would relate to my parents and friends wonderful and strange things which I said I had seen or had dreamed of. They did not believe, of course, that I had seen these things but thought that my memory painted them so vividly that I thought I had, while on the contrary I did nothing of the kind. I was aware the whole time that I had never dreamed these strange things nor even seen them. I knew perfectly well that I was merely imagining them but for some unaccountable reason I told of the imaginings as if they had been actual happenings or dreams."

Another boy in the Junior High School offers an instance of imaginative exaggeration that is humorous. "Once when eight years of age and when visiting my grandfather in a small town in central Michigan, I dug a rather large hole in the ground. A few nights later a severe thunderstorm occurred. The following morning when talking about the storm to a boy of my own age who knew nothing of the hole, I casually told him that the lightning had struck close behind my grandfather's house and made a big hole in the ground. (I had in mind the hole of my own digging.) Having lied so far my imagination helped to elaborate and I went on to describe how the potatoes were scattered, and other details which I don't remember now. When he showed a strong inclination to investigate I went on further to tell how I had 'squared up the hole' and cleared away the potatoes, making it look 'as if I had dug it myself.' At the time I felt no pangs of conscience, later I did."

Professor Kirkpatrick says, "It is as important for a child's intellectual development that he shall learn to distinguish clearly between real experience with persons and things and those that he images, as it is for his moral development that he should act and speak in accordance with what he knows to be real." The child gains such ability by playing that things are other than what he knows them to be, thus bringing his imaginings and knowledge of real things into sharp contrast. Hence imaginary companions are valuable to him in contrasting the difference between real people who do not act at his willing and imaginary ones who do act at his bidding. The constant testing out of his powers first on the one and then on the other, further helps him to accurate perceptions of the qualities each possess. The child who eats grass while he is playing he is a horse appreciates the attributes of a horse much more keenly because he has sensed the difference between their food and his. He gets a more accurate picture and so is more capable of knowing the truth regarding horses. He comes to less readily believe a thing merely because he would like to have it so, for he has tried that out and found it disappointing. He comes to rest more upon his own actual perceptions rather than his imaginings or the statements of others. So long as he acts out his imaginings he is gaining a constantly clearer mental picture of what is true and objectively real. He comes to recognize the imaginary element in figures of speech and catch the moral of fairy tales. In short he becomes an astute discerner of truth.

H. Addington Bruce in a recent article stated that he considered lying in children chiefly due to an hysterical expression

of suppressed imaginings and two instances that we have studied have shown marked signs of hysteria. One college student wrote quite frankly of her experience. "The year I was eighteen, and in my last year at high school a notable event took place. Wallace Reid, the famous 'movie star' came in person to San Francisco. He was to appear at a certain theatre only once, and unfortunately this appearance was to take place in the afternoon during school hours. Being young and foolish, I felt that my presence at this one and only appearance was a matter of life and death, but it was a difficult matter to arrange, because extreme illness was the only excuse upon which I would be permitted to leave school. Accordingly I set my emotions and imaginations to work, and after a very short period of concentration, actually grew alarmed at my imagined symptoms of illness. Being a species of 'pathological Liar,' I actually for the time believed that I had every reason for woe, and even managed to summon tears as evidence that I was quite incapacitated to continue the afternoon's work. The teacher, on observing my wan looks, grew very sympathetic and took me to the Principal, who was also solicitous and prescribed a period of rest at home. The difficulty was that I had lied so convincingly that it was only by feigning a speedy recovery that I was permitted to depart without an escort to see me safely home. This lie stands out in my mind more prominently than others because I was for the time being, so occupied with working up the necessary artistic effect that I completely lost sight of the ultimate object until I was safely out of sight of the school."

Nathan Oppenheim, taking the physician's viewpoint concluded that most children's lies are due to bodily disturbances which distort their perceptions or morals and interfere with the transmission of conceptions and perceptions from the internal to the external processes of expression. There is undoubtedly a lowering of the mental abilities as well as moral fibre in cases of vitiated strength or pain, but we have been able to find no studies on the subject with which to sustain the viewpoint. Professor Demoor suggests that lying is a physical disability and should be treated as such by segregating the children in special classes. Certain types of highly imaginative children would be greatly aided by special sympathetic instruction in clear perception, apperception and memory, and similarly unimaginative children would be benefited by special help in developing the imaging qualities they lack. Also, special care in nerve control in cases of hysteria and clearer moral ideals in cases of lowered

moral tone due to environment, or companions, would be helpful to a young deceiver, but the problem is universal and hence would not permit of treatment by segregation.

Most of the lies falling in this group are merely the expression of immaturity. Such tests as Binet proposed for testing children's accuracy in perception and memory indicate this clearly. Following his suggestion William Stern with others has developed what is known as the "Aussage tests." The experiments were made by showing a group of children a picture of a living room in a peasant's home and then requesting them to write in narrative form what they saw and later to answer questions regarding the picture. The results were five to ten per cent errors in the narrations and twenty-five to thirty per cent errors in answer to the questions, showing a high degree of suggestibility. The children of seven years returned fifty per cent of errors while the children of eighteen years returned only twenty per cent of errors. Prof. Stern concluded that the errors were due to what the children thought they ought to see in such a picture, what they really forgot, what they unintentionally added to give picturesqueness and a lack of self criticism in checking up these errors with what they really saw. R. Oppenheim showed thirty girls from ten to twelve years a well known colored print and asked fifty questions regarding it. Of the returns forty-nine out of ninety answers were correct. Repetition showed a great improvement in fidelity of perception and memory.

The experiments of Miss Borst and Prof. Wreschner also indicated that the capacity to see and report correctly may be readily educated in children. All the children's reports showed a greater percentage of inaccuracy than those of adults. Prof. Stern reported the correct statements as doubled at thirteen years and trebled at eighteen years.

William Healy in dealing with delinquent children gives a simple test by showing a picture of the interior of a butcher shop. He finds that his returns give him a fairly accurate estimate of the abilities of the child in correct perceptions, apperceptions, memory and suggestibility. It is interesting to note that he finds the delinquent child who is a liar by necessity passing such tests only a little below the average child indicating that even where intense fear constantly provokes the child to defensive lying it does not seriously affect his mental abilities at least during childhood.

Such studies offer us three hopeful conclusions. First, that the imaginative tales of our children are but the healthy expression of immaturity; second, that experience with real

things tends constantly to correct and clarify the uncertainties that exist in their minds, and third, that even unusually imaginative or unimaginative children can be trained or educated to a normal standard by careful help in forming accurate perceptions and memories.

2. *Emotional Impulsions.* Under emotional impulsions we have grouped fear of physical punishment, of disapproval, of ridicule, of being deprived of some desired thing, desire for praise or sympathy, to protect another or personal and secret affairs and to insure another from anger or jealousy. Of the four hundred and thirty-nine instances in this group one hundred and ninety-four instances or forty-four per cent were due to fear of punishment, eighty-seven instances or nineteen per cent were due to fear of disapproval and thirty instances or seven per cent were due to fear of ridicule, making a total due to fear of social or physical discomfort of three hundred and eleven instances or seventy per cent of the group and forty-eight per cent of all the instances collected.

G. S. Hall, William Stern and several others who have studied the problem seriously have found the same majority of lies due to fear. As Kirkpatrick says, "deception is the principal means of defense of weak creatures whether human or animal when exposed to danger from the strong." There is little doubt but that children are often "Weak creatures—exposed to danger from the strong," as the following instances of each type of fear indicate. Fear of punishment is illustrated by the child that "had been told not to go into the house of the little girl she was playing with, and to come home sharply at five o'clock. The child disobeyed in both particulars—not intentionally but more through carelessness—when she got home about six o'clock her mother was very angry and asked her sharply why she did not come home on time and if she had been in the house of her little girl friend. The child saw a severe spanking in store for her; therefore, said she had not been in the house, and made up some fictitious excuse about her late arrival home."

The fear of ridicule is not less important as one girl's story shows. "When I was about ten years old I innocently wrote my name with my finger tip in the dust on the back of a friend's carriage that had just come from the paint shop. Several days later the friend was at the house again and asked me if I had done it. I was very much surprised to see that my name was scratched on the buggy. Unconsciously and unknowingly my nail must have scratched it. Frightened I denied having written it. The woman asked my sisters, who said it was my writing, but still afraid I kept on denying it.

Only my mother took my part and said she knew I would not have lied had I done it. Then I could not tell. Every night I would spend a couple of hours of misery before I could go to sleep. One day my father saw the buggy and naturally recognized my writing. He came home and asked me why I had done it. Again my mother was going to interpose, but it was too much, I told the truth then and slept better that night than I had for a month."

To the child, approbation, praise, and unbroken social relations with those about him are as essential to healthy growth as fresh air and sunshine. To assimilate his food and get the proper exercise he must feel constantly that all is well between him and those about him. A chill atmosphere of indifference or disapproval produces a depression of all his faculties both physical and mental. The most scientifically fed orphan in an asylum is found to be from two to three years retarded both in physical and mental growth beside the child reared carefully in a happy home. Fear of Mother's or Father's frown or repulsion is almost as acute as fear of physical pain. Hence the frequent lies even when no punishment is expected. As one child put it, "To my parents I am about the most perfect child that ever was born. Not that they would object if anyone criticised me but they feel that I shine out above all criticism." When she was repeatedly naughty and her teacher sent home a note she says, "But I just couldn't get myself to present these notes to my doting parents. I was too proud to have my Mother look at me and say, 'I always thought you were a little lady.'" She saved her pride by lying, a perfectly rational means of self defense from her standpoint, until one day it failed.

To avoid rupture and punishment children quite mercilessly shift the blame of their acts upon another child and seldom seem to regret it. One boy states, "When I was a little boy I broke a window with my football. I ran to father saying 'Look, brother broke the window.' My brother accordingly was punished."

Of the other emotional impulsions the desire for sympathy, understanding and a goodly portion of approbation came first in number of instances. It included fifty-six instances or fourteen per cent of the group. They illustrate how far we as parents fall short of answering this innate need of our little ones. Too many times in the rush of "Twentieth Century" living we forget to hold sacred the brief moments of intimate companionship with our children which are the main spring of their self respect and later strength of character. To know some one is backing them unreservedly in all they do helps

in untold moments of temptation. A boy of thirteen years writes, "When I was about seven years old I told a friend of mine that my sister and I were twins. She was the same height as I was, but was a year younger than I, and in a lower grade at school. It all went well until my birthday came. He gave my sister and me both a present. I don't remember telling a lie ever since. I told the lie to show him that I was smarter than my sister, because I was in higher grade."

Of the selfish lies there were thirty-three or seven per cent of the number in the group. They were chiefly told in hope of preventing the loss of some desired toy. An odd ball or top, or marble, having attracted their attention, was taken and later the act denied. Most of these were told between children and generally by the person from whom the toy was taken. Under such circumstances the lie was generally denounced, as in the following instance, but not so when the lie was told by the relater. "One day when I was playing marbles with a boy, I lost one of my marbles. I was looking for it for about a half an hour. A little while later I saw the boy I was playing marbles with pull it out of his pocket. The next day I asked him if he found it and he said he didn't. (Boy twelve years.)"

There were only twenty-one heroic lies in the group and eleven others which had an element of unselfishness in them, making up but seven per cent of the group. Of the twenty-one heroic lies, all were told to protect the life or happiness of another. Several were adult equivocations which had evidently been told to the children with some pride in the unselfishness of the act. The eleven instances told to protect a secret or personal affair were less unselfish but still held enough of the Don Quixote spirit to seem justifiable in the sight of the teller. One little girl of thirteen years had been given a gold banded fountain pen for Christmas. While taking charge of a second grade class during the teacher's absence for the morning, one of the pupils became headstrong and took the pen away from the girl—and threw it on the floor, breaking the pen. A few weeks later the girl's mother asked to borrow the pen. She immediately answered that it had been stolen but on being questioned closely she said that she had broken it. Her reason for the lie was that she was afraid that the child who had broken the pen would have to pay for it. Another girl of sixteen "when asked her grade in a certain class said she had received one hundred when in fact she received only seventy. She of course knew she was telling a lie but she felt that it was no

one's business what her marks were, therefore felt she was not doing wrong."

Seven children related really malicious lies which were told in the heat of anger or jealousy and intended to injure another person. They remind one of the stories that circle about during political campaigns except that they were not premeditated and were generally regretted soon after they were told. One girl confesses, "When seven years of age I had a ring of which I was very proud. I played with a certain little girl constantly. One day she was playing with my ring and in some way lost it. This child was known to be rather untruthful. As a result the story which I in my wrath concocted of her having intentionally thrown my ring in the gutter, was believed. To this day I have a feeling of guilt when I meet her."

Our study of this group of instances made clear several points: first; that children's deceptions are chiefly a handy means of avoiding undesirable consequences, second; that the great majority are impelled by fear, third; that the child is extremely sensitive to smiles and frowns and conducts his truth telling and lying very much by them, fourth; that children are essentially egotistical and will lie readily to gain a desired object or vent their anger, and fifth; that children do recognize the problem involved in truth telling and do rise to the understanding and telling of heroic lies to save the life or happiness of another.

3. *Willful Inventions.* Under willful inventions have been grouped those lies which lacked emotional intensity and which were more or less premeditated. One hundred and thirty-three instances, or twenty per cent of the total number of instances, came under this grouping. The chief causes were a desire on the part of the child to gain his own way, to be relieved of some work or tedium, to avoid paying for something or, with adults, to obtain professional ends. There were ninety instances or sixty-eight per cent of the group which fell under the willful desire on the part of the child to have his own way. Most of these were entirely selfish and did not differ greatly from those told to avoid work or tedium. There were thirty-nine instances of the latter which were generally casual reactions to unpleasant demands. One delightful child "with other children in the neighborhood, was accustomed to ask the man in the corner grocery store for candy. They would always say their mothers sent them and that the article should be charged. Finally a bill came to this child's mother and she told the grocer not to give any more sweets to the child unless she sent a note. One day little (4 year old) Mary

came with a piece of paper and handed it to the grocer. He opened it and saw nothing but scribbling which Mary meant to be writing. He asked what it was for and she said, 'Can't you read that it says that you should please give Mary some candy.' Of course she got the candy in spite of the lie." Another less clever girl writes, "I had to take a music lesson every morning from eight to eight-thirty. One morning I wanted to go to school early to play but mother insisted on my taking my music lesson. I started out for my lesson but walked straight past the house and went to school. When I came home mother asked me why I didn't go to my lesson. I insisted that I went, but Miss G. was not home. She didn't answer the door. I kept up the lie for two or three days. (Girl 8 years old.)"

Such lies are dangerous chiefly because, although the discrimination and memory remains clear a power to dissimulate is acquired in order to accomplish the ends desired and the more often it is indulged in the more dangerous it becomes. Because they do not involve deep emotions, such lies are rarely regretted or brought to the focus of the child's attention. They remain a casual means of getting one's own way. Two of the Junior High School girls apparently justified such lies by so wording their statement of untruth as to dodge the actual truth and yet give a literal truth. They headed their accounts with "True Lies" and seemed to feel rather proud of their ability to both tell a truth and obtain their own way by dodging the real truth. Such an attitude is particularly dangerous because the ideal of truth telling becomes clouded and involved and the child's conscience suffers from the loss of frankness in dealing with the lie. He justifies his evil intent in the literal truth which taken in its right sense would not be a truth at all since it conveys the meaning of an untruth. If the child is to be taught the difference between truth and falsehood he must be made to see and recognize a truth as the essence of the meaning he conveys by his statement not the literal interpretation of his words.

4. *Other Causative Factors.* From so small a collection of instances of lying gathered indiscriminately from college and Junior High School students there can be no conclusions regarding sex differences. In Prof. Stern's experiments women returned fuller accounts in the "assuage tests" and more errors, the men's accounts being more conservative and more accurate. Miss Borst and Prof. Wreschner found that women returned more detailed accounts with a higher percentage of accuracy than men. But such studies are inadequate as yet and only indicate the possibilities of the field. In the present

study the slight predominance of instances told by women is due to the fact that in the college classes where the requests for instances were made there were more women enrolled. The significant facts for our study are, that both boys and girls pass through the period of intellectual immaturity and hence frequently digress from the truth, that both are impelled to lie from the same emotional impulsions, and that both consciously invent fabrications to obtain desired ends.

Whoever has seen Houdini or one of his followers cannot but be struck by the imperfections of even adult ability to perceive accurately. Although the audience is conscious that Houdini is going to deceive them and may have determined not to be deceived, nevertheless Houdini apparently waves his hand and becomes instantly invisible before their eyes, or becomes suspended in mid-air without visible support. The same adult imperfection of perception is brought out in every court trial where several persons testify to the events of a certain occasion. No two people testify with the same degree of accuracy nor can anyone of them testify with absolute accuracy. This being true it is quite apparent that immature children cannot be expected to adhere closely even to adult's knowledge of truth. Further, children lack judgment as to how to relate what they have perceived. In a series of events they may suppress just that detail which adults in their experienced judgment recognize as important and decorate, or enlarge upon that detail which a mature mind would discard as unessential. This is often done unconsciously as the expression of immaturity, and should be recognized and dealt with as such by the parent.

"There are more lives spoiled by undue harshness than by undue gentleness," says Hugh Black in his book on "Friendship." "More good work is lost from want of appreciation than from too much of it." This is particularly true of children. So often the way a question is asked provokes the untrue answer. Parents forget the natural timidity of children. They forget that children in a sense are recapitulating the race; are passing through the struggles of all mankind from necessary animal deceptions through primitive man's connivings against wild beasts far stronger than himself to the clearer moral atmosphere of confidence. If the parent's attitude is belligerent or even uncertainly cold the child follows the cue and drops from frank confidence to the level the parent has established by his or her manner. No one can honestly blame a child for dodging his responsibility when so accosted. In fact his misdemeanor becomes only an incident to cover up. The avoiding of physical or social pain

DIVISION OF ATTITUDES REGARDING LYING BY CAUSES

Attitudes	Imagination	Fear	Disapproval	Tedium	Invention	Deprivation	Approval	Heroic	Ridicule	Secret	Sensation	Professional	Avoid Paying	To Injure	Total	Total
Felt lie was painful memory	1	34	11	4	7	8	8	2	2	1	4	1	..	2	84	
	..	29	..	5	4	1	5	..	..	..	2	..	..	2	48	132
Felt lie was expedient to end in view	..	22	16	4	22	4	6	6	3	..	1	1	..	..	85	
	..	14	8	4	5	4	2	2	8	..	..	..	..	..	43	128
Felt lie was harmless	10	1	..	1	..	..	1	1	..	1	6	..	..	..	21	
	6	..	1	..	1	1	1	..	1	1	13	..	..	..	25	46
Felt lie was justifiable, resented punishment	..	6	4	3	8	..	2	3	1	..	1	..	..	..	28	
	1	2	..	4	..	1	..	3	..	4	1	2	..	..	18	46
Felt lie was useless	..	12	4	1	1	2	1	..	1	1	..	..	..	1	24	
	..	8	1	3	..	2	1	..	..	..	..	..	..	..	15	39
Felt doubtful of lie	3	4	2	3	2	1	1	..	..	..	1	..	..	..	17	
	1	4	..	..	..	1	..	..	1	..	..	..	..	..	7	24
Totals	22	130	47	32	50	25	28	17	17	8	29	4	..	5	415	415

becomes his first consideration and the parent's attitude generally determines the means to be used. One might go so far as to say that the parent's or questioner's attitude determined all lies told from emotional compulsion and many willful inventions. If whole-hearted confidence exists between the questioner and the one questioned it is doubtful if any child would often feel the need of lying from fear or desire of any kind.

It is only as Prof. Melinand points out when the child discovers that in social living he may not be absolutely sincere; that he must not tell all that he knows; that he cannot be his natural self but must conform to certain standards of politeness which forbid wholehearted activity, that he becomes habitually dissimulative. He discovers that others about him lie, even that acme of perfection, his father or mother. Then, being frequently the center of attention he cultivates his audience and is stimulated to exaggerate or invent to keep their attentions or obtain his own way. A well known public speaker fearing the potency of this stimulation discontinued his public addresses. How much more dangerous must it be for a child who lacks both clear discrimination and moral judgment. The child soon learns by experience that lies may be "an abomination unto the Lord" but they are "an ever present help in time of trouble." One girl of thirteen years writes, "Sometimes I cannot help telling lies." Another seems to think it "natural for all small children to tell their lies or fibs in order to make their stories more probable. It is much the same as a game and almost as much fun as fulfilling the lie. Grown persons should not count much on children's lies or they would be misjudging them by ordinary child pranks which are soon outgrown. Falsehood in children is a game that children outgrow under the correct supervision of their parents and teachers!"

Truth, because it is learned chiefly at the parents' or teacher's knee is not very different from loyalty. To love and be loyal to one's parents is translated in the child's mind into acts which will meet with their approval, hence truth telling becomes one of the attributes of love and loyalty to the child. To be honest to Mother is to love her, but also to have an enemy is to owe him no such obligation. Children often feel no hesitancy about lying to a teacher they dislike because, "She didn't deserve to know the truth."

In the present study four hundred and fifteen or about sixty-four per cent of the total expressed their attitude toward the instance they related. Of these one hundred and thirty-two or thirty-one per cent thought that the lie was wrong.

One hundred and twenty-eight or thirty per cent thought the lie was expedient. Forty-six or twelve per cent thought the lie was harmless and an equal number thought the lie was justifiable. Thirty-nine or nine per cent thought the lie useless and twenty-four or six per cent were doubtful. The data is too limited to more than indicate that there is as great a diversity of opinion among children as among adults. The fact that less than a third thought lying wrong is, perhaps significant though not conclusive. (See accompanying table.)

V. Habits in Lying

Many things contribute to make a child a habitual liar but Prof. Kirkpatrick thinks that fear is the chief cause for "without it most children would find truth-telling more serviceable and satisfactory. In reasonably favorable surroundings the child who tries lying finds that though it sometimes works well, or for a time, yet unpleasant results come either in the form of punishment, ridicule or disturbance of social relations with others. So that he gives it up except under unusual stress of fear or desire. Under conditions of antagonism to others and of greater or less success in deceit, he becomes a habitual liar in spite of occasional punishment."

The habitual liar may be a child who has not learned to distinguish clearly between memory and imagination, or he may recognize the difference but substitute the one for the other to obtain his own ends until they have become so confused that he can no longer distinguish clearly between what is true and false. The continuance of any cause such as indistinct memory, fear of punishment, lack of appreciation or too great restraint in play will eventuate in habitual lying. It could scarcely be otherwise. Each success in lying makes the next easier, the skill greater and the temptation keener; and although most children do in a measure outgrow the habit, the frequency with which we find lying among adults indicates that the habit once established is difficult to overcome. One college student wrote that while she had outgrown the tendency to fabricate imaginary tales the tendency still remained to exaggerate to creat a sensation and lie cleverly from fear of social discomfiture.

Occasionally the habit develops a pathological case. It would not be of interest here to go into any lengthy discussion of pathological lying yet a brief statement of what is known of exaggerated lying maybe of profit if only because in such abnormalities we find the normal "writ large." William Healy has defined pathological lying as "falsification entirely disproportionate to any discernible end in view engaged in by

a person, who at the time of observation, cannot definitely be declared insane, feeble-minded or epileptic." He found it to be a trait rather than an episode in the life of the child and shown throughout life. It is, however, never the sole misconduct but always follows other delinquencies. The mental processes are similar to that of author's only the pathological liar wants to both create his story and act the leading rôle. He confuses real life with his story and becomes so fascinated in the delightful pastime of living the assumed rôle that he ceases to pay the proper attention to other details of living. His moral judgment becomes vague and indecisive. He grows poetic and drifts about in free imaginative play. He resents being disturbed by real facts or jostled by real experience. In the "assuage tests" he uniformly invents additional objects and accepts many of the suggestions offered by the questions, indication how vague the distinction in his mind is between real and imagined objects. All but two of Judge Healy's printed cases had inherited an unstable moral make-up and several had had mental conflicts due to unfortunate early sex knowledge and experience which had given rise to the habit. He found that any period of mental or physical stress and especially adolescence tends to unbalance the mental abilities and befog the power of clear judgment. All of his cases developed during pubescence or adolescence and it is chiefly for this reason he feels that most such cases can be cured by sympathetic and intelligent care. When the period of physical and mental stress is over the child if carefully guided through the storm may recover poise and complete mental balance. The cure lies in following such simple rules as checking up at once, each lie, taking care in developing accuracy of memory and, where there is special ability in constructive imagination, an opportunity to use that ability in some literary pursuit. Such advice is sound for all parents and needs only to be emphasized where habitual lying has been allowed to develop.

VI. Contagion in Lying and its Relation to Other Delinquencies

Parental love has little lasting value if it is not an inspiring force to upright generous deeds. It is not such a force in the child's life unless it makes him feel that there is some one who thinks of him steadfastly and would gladly help him, not punish him, at each crisis. In much of his conduct when the parent is not present there is the thought of how the parent would view the act and "according as the child thinks the conduct would be approved or disapproved does he have an

impulse to reveal or conceal it. His feeling of the approval or disapproval of others becomes his conscience. This conscience becomes stronger and enlightened in proportion as sympathetic relations are maintained and free communication kept up between parent and child. It becomes weak and perverted in proportion as sympathy is destroyed and the ideas and feelings of each toward the other are misunderstood or misrepresented."

All lying presupposes an estrangement between the parent and child and it is in such strained relations that suggestions of lying from another child take root. One little girl having been caught in a misdemeanor at school made a special trip to her friend's house to talk over the "fib" she had told their teacher that their stories might hang together. Several groups of children wanting to escape some work connived together to accomplish the deception. The instances are replete with such statements showing how potent is the influence of one child's suggestion upon another. Then, the fact that two or more are going to tell the same story lends an unwarranted feeling of strength and justification to a lie. It binds the children together in a secret which is destructive both to their moral life and their relations to their parents. One habitual liar in a group of play fellows may demoralize the whole group for, first of all the lie affords protection and the need of protection has always been the great force in banding men together. The "tattle tale," that traitor of childhood is held in the utmost contempt. Often he is ostracised from all play activity lest he be initiated into some secret and "spoil it all." There is much of the heroic in the lies to protect a gang secret but there is also a heroism in honest "tattling" provided it is not born of low aims. Even heroic lies are not necessary when Mother's gentle comprehension suffuses the child's thoughts of her. And such confidence is a mighty protection against temptation of all kinds for a lie strengthens every evil estranging influence. The protection it affords may be handy but it is perilous and the sooner the child is made to see its dangers the more hopeful becomes his outlook.

VII. Standards of Adult Conduct in Lying

1. *Social.* Since children's morals are determined so largely by those of their parents, a study of any phase of their moral problems would be incomplete if it did not include at least the larger aspects of adult's morals in regard to lying. Our conventional social life offers a striking paradox of standards. A lie implies "strong moral censure" yet our conventionalities

make their use a law like unto the "Medes and Persians." We are insulted at the barest suspicion of an accusation of untruth yet we are aware that we all constantly conform to "correct" standards and use "white lies" whenever necessary. A child soon learns how "incorrect" it is to contradict even that which he knows to be untrue. Certain truths must go unspoken: certain untruths must stand uncorrected. At first glance such a confusion of ideals seems absurd but our social life is not based upon superficialities. Our standards of social conduct are not a hit and miss jungle of unrelated rules of conduct. They are rather the expression of definite human needs brought into being by group life.

Five more reflective authors neither justified nor condemned lying but rather pointed out the difficulties involved in truth-telling. Miss Latham in her study of falsehood proves conclusively by an analysis of many vocabularies that all life and language are permeated with falsehoods and another writer seconds her conclusions by attempting to show that as an ideal truth-telling is helpful but in the present age an absolutely truthful person would be a moral monstrosity because our moral sense is still imperfect. We cannot do more than live up to the morals of the age in which we live. It is idle dreaming to expect perfection now. Clayton Hamilton points out that to tell the truth involves perfect perception, the selection of significant facts, the recognition of the truth of these, a knowledge of the principles induced, the ability to reduce the principles involved from abstract laws to concrete rules of conduct and the ability to express the result so the hearer will understand correctly. Even honest-minded people accomplish this only one time in a thousand for our perceptions are inaccurate, our judgment poor, we induce unconsciously what is untrue, evaluate the facts incorrectly and express even that which we believe to be true very crudely. Further, we assume that our hearer has passed through the same experience and will understand our expression of a truth as we do. This of course is untrue for no two people have had the same experience, so cannot have the same apperceptive basis for understanding. To the American mother the "beautiful German home life" is a debauchery of theatres and beer drinking. To Keats, "beautiful" and "good" were synonyms but to Cromwell or to Savonarola they were antithetical.

2. *Vocational.* In the vocational world the same confusion exists. Few medical men or nurses for instance, agree with Dr. Richard Cabot that no patient was ever injured by the exact truth regarding his physical condition. Most doctors

realizing their limitations modify this statement in view of what may develop to-morrow and their own inability to know "the exact truth," especially when they have a nervous or delirious patient to deal with. Mark Twain, feeling the force of this wrote a short story entitled "Heaven or Hell" in which he depicted two Puritan old maids who inadvertently caused the death of their beloved niece as a result of their extreme idea of truth telling. With hearts breaking over the burden of their sorrow they preserved the Mother's last hours in peace by lying hourly regarding her departed daughter.

In spite of the fact that a physician's success with any patient must rest on the patient's confidence in what he says, yet it is expected that the physician will not only diagnose the case correctly but will judge shrewdly what details to tell the patient and what to suppress or evade. It is entirely beside the point to say as Dr. Cabot does that the Devil is the father of lies and we admit needing his help when we speak falsely. The keen intellect of the specialist bending all his powers to solve a problem of malassimulation or high blood pressure is scarcely seeking help from the devil when he evades telling a crushing truth in the hope that it may prove to-morrow only an anxiety of his own imperfect knowledge.

The following quotation is taken from a recent issue of the "School and Society" showing the attitude of the press regarding the problem.

"Throughout last summer there was a good logical, if bad moral, reason why the American press should have given acres and acres of white paper to the misrepresentation of Russian conditions. We were about to intervene, or were actually intervening, and nobody could say how far intervention might go. In obedience to the principle, My Country, right or wrong; and if she is wrong, let not us her sons acknowledge it, a great many Americans, not in any way connected with the paid interventionist propaganda, made a duty out of blackening Russia, etc."

Whatever is to be said regarding such a national policy at a time of world crisis—it is well to recall that not all press deceptions are done for as worthy ends. During political campaigns the newspapers have undoubtedly fostered lying and misrepresented much regarding the character and abilities of opponents. Nor are the politicians morally above the newspapers which boost or defame them for they too are involved in the same adjustment of ideals and ambitions. The following advertisement recently used in a campaign illustrates the point. The gist of the placards advertising Mr. Brown for Superior Judge were

"Elect J. J. Brown Superior Judge.
(keep him on the bench.)"

Presumably J. Brown is to be re-elected to the superior judgeship but on the contrary he is to be elected there for the first time. Heretofore he has been a police judge.

The lawyer who hesitates to defend a client whom he believes is guilty, the commercial salesman who suppresses the bad qualities and enlarges on the good qualities of that which he is trying to sell whether it be real estate or coffee or stocks and bonds is passing through the same moral struggle. The pure food laws have helped the producer of food-stuffs by gradually taking the place of his backbone and judgment and standardizing truthful production and advertising. In all occupational fields this is coming to be true. The defamers of Theodore Roosevelt paid dearly for their political trick. The boosters of watered stock must answer for it in court. The producer of food-stuffs who claims ingredients which do not exist in his product stands in danger of heavy court fines. Each step in such standardization of truth in the commercial world helps in doing away with the temptation and dangers of misrepresentation. It is unfortunate that much lying may still be done within the law.

The field of vocational ethics in regard to lying is of interest in the present study for two reasons, first it forms a vital part of the child's environment and second the great majority of children soon enter one or other of the vocations and help solve its ideals. Hence it is worth while for parents to study the everchanging ideals of the modern business world and arrive at a fairly definite idea of the highest ideals in each field. It is of value that each parent subscribe his or her influence to the legislation which tends to standardize our ideas of truth in the business world, and it is equally worth while that we review our own conduct and ideals to be sure that they are in accord with those ideals which we wish to inculcate in the minds and hearts of our children. Nor should this apply only to the technical business world. Housewifery and motherhood are as truly vocations as salesmanship or civil engineering. They are as fraught with problems in truth-telling as the most complex professional vocations. Nor is fatherhood rightly eliminated from the field of vocations though for Americans it is seldom so dignified.

3. *Lies we Tell Children.* Only recently have parents considered seriously the vocation in which they are engaged in rearing their children. Previously children were allowed to grow to partial maturity before any concerted effort was made to fit them for life. At pubescence society suddenly took over

the matter of training for adult life. In primitive tribes it consisted of the rites of soldiery and marriage: in more civilized states it included apprenticeship in some vocation and entrance into the religious ceremonies. But to-day we start at the beginning. We know that the future statesman is determined by our vocational ideals as parents from the date of his birth. Hence it is of the utmost importance that parents review their ideals and conduct in regard to lying. If we tell our children that the moon is made of green cheese, that rabbits produce easter eggs and Santa Claus brings them their gifts at Christmas, how can we expect the child not to do likewise? We can tell the child the tale of moon made of green cheese making him realize the fanciful in it, or the story of St. Nicholas's life and how his spirit has come down to us without marring the exquisite qualities of either.

One boy in the Junior High School offered the following instance from his experience.

"While very small I was led to believe that if I told a lie a black spot would appear on my tongue. I firmly believed this and when I would do something I thought no one would believe me about I would stick my tongue out for them to look at. One day . . . I was afraid to tell her mother I had, so I said, 'No.' She asked to see my tongue. I was afraid to let her see it but I did. Strange to say she didn't see a black spot. I was surprised at first but I began to suspect that a black spot wouldn't appear."

There are probably no lies of parenthood more universal or harmful than those dealing with sex knowledge. Social customs have tended to debar all honest discussion of sex from any except professional circles. Fathers and mothers alike have shrunk from any discussion of the actual facts and as a result numerous lies have grown up. The stork, an angel, the doctor and even God have been accused of bringing the new baby into the home. Such lies are always pernicious for several reasons. First, they are untrue, second, every child must one day learn that they are lies, third, they deal with the most significant fact in human life, fourth, they create an estrangement between parent and child on a subject of which it is of the utmost importance that there should be frank discussion if the dangers of ignorant immorality are to be avoided, fifth they thrust the child upon incorrect, generally vicious knowledge learned from playmates or friends, and sixth they lead to a suppression of wholesome sex growth and tend to cultivate unhealthy sex practices and frequently lead boys to consultation with that most dangerous branch of quack doctoring, the advisor of sex disorders.

Of the less serious parental lies those to avoid the tedium of detailed explanations are the most common. The present day parent lives on the run and is often tempted to dodge the endless questions of little inquiring minds. Many questions it is true, we could not answer if we took the time and it is safer in such cases to admit our limitations at once rather than tickle our vanity by lying and allowing the child to discover the truth later. It is always dangerous for our children's confidence in us to lie about the price of an article, or the way an evening was spent. They discover the untruthfulness oftener than we guess and their estimate of us suffers in consequence.

One other attitude, vocational morals offer us. When a person is accused in court of any crime he is not expected to give any incriminating testimony. No directly incriminating question need be answered. The court investigates through witnesses and then permits the accused to defend his case. The assumption is always that the accused is guiltless until he is proven guilty. The burden of such proof rests exclusively on the accusing party. In dealing with children parents rarely assume this attitude, yet to do so would save them much anxiety and the child from many severe temptations.

4. *Religious.* More serious in moral effect than the commonplace lies which are the warp and woof of our group life, are the lies and evasions which have come to be grouped about, and in some measure woven into, our concepts of religion. It has been a long time since we believed in the faked oracles of the Greek temples or the witchcraft of medieval saints and demons, but both have left their mark upon our ideas of religion. We still picture and teach our children of the devil as an individual whose influence may determine our conduct and of a God not unlike Zeus sitting out in the Heavens, passing judgment and meting out favors and punishments from His exalted seat. Although there is no substantiation for the belief we teach our children of a heaven of our own devising, and a hell even more lurid. We dare to state these beliefs as facts which sooner or later every child will recognise as "works of faith" and relegate to the scrap heap of childish delusions. Whether he regains them by "faith" or not is shown in the immense falling off of Sunday School attendance after the mental upheaval of adolescence. From the struggle to reconcile the Sunday School teachings of honesty and its teachings of God, the authenticity of the Bible, the devil, Heaven, Hell, and many other concepts held by Protestant churches but few adolescents

survive. Just how serious the effect of such a struggle is upon the individual child cannot easily be estimated. In some cases it has been known to cause a complete reversal of faith and great indifference to the moral standards of the day. One college student wrote rather bitterly that she had lied to her mother lest her unbelief wound the older woman. That such a struggle should be necessary at any period of life is a pathetic commentary on Sunday School methods.

A professor of one of the large eastern universities, on being asked why he did not send his child to Sunday School replied that he had visited several Sunday Schools and found that the children learned so many untruths that he had decided to undertake the child's religious education himself. One has only to attend open-minded any nearby Sunday School to appreciate the justice of his decision. But in his attempt to give his child only the truth he had forgotten the most essential fact in the problem. Religion is a social concept. A child cannot be religious alone but only in his relations to other beings; so he cannot be taught religion alone, but only in modified conduct toward others. We, as parents, have turned over the education of our children in religious ideas to the churches because they are the social institutions which have been dedicated to this service. If the Sunday Schools are teaching untruths it is primarily our fault. The control of democratic social institutions lie with the people who compose them. Anyone really interested in the problem has only to affiliate themselves with some nearby Sunday School organization and help to solve the problem of truthful lesson material. The present day Protestant churches welcome anyone seriously interested in the problem.

At the other extreme of religious struggles over matters of conscience stand such bold deceits as are practiced by the spiritualists and mediums. In medieval times pubescent girls repeatedly resorted to witchcraft to enrich the bareness of their days. In recent years the Society of Psychical Research has exposed many faked mediums but every city newspaper contains several advertisements of mediums who will undertake to get into communication with loved ones long since dead for a dollar or five dollars, as the case may be. Such frauds would be as harmless as the conjuring deceptions of Houdini if it were not that they are so closely interwoven with the religious ideas of the people who patronize them. The inquirer looks upon the medium from a divine source and is often greatly influenced by what the medium says. For some it becomes a real religion and for some a means of livelihood.

VIII. Literature and Lying

How early literature becomes a force in the child's environment depends largely upon the type of home in which he lives. Some parents begin very early to read imaginative literature to their children while in other cases the school introduces the child to the world of books. Whether at two or at six years most children very early become acquainted with the folk lore of theirs and other lands. "Mother Goose" is the classic of the American nursery and is soon followed by Hans Anderson's Fairy Tales and others of the same type.

Ten representative collections were studied to confirm our opinion that all such collections of folk lore contain frequent instances of lying. These covered the Norse, German, Russian, Irish, Indian, Italian, Greek, Jewish and African collections. They were fascinating reading but for the present study offered merely the confirmation of opinion. There was no collection but what contains many instances of lying with no feeling of apology or regret. In fact most of the lies were treated as very clever tricks by which the hero or heroine proved their metal. The only difference in them was that the northern stories were more complicated than the crude Bushman's tales. The Bible offers numerous instances but more often condemns the lie. Jacob's deceit is typical of them all.

George Sand's heroine who bewitched Frederick the Great, Victor Hugo's nun who saves Jean Valjean from Javers with a lie, Barrie's Admirable Critchton who evades what he does not wish to face, Dicken's Phoebe who praises her gullible mistress are all refined examples of the same underlying traits. Rudyard Kipling with characteristic daring devotes fourteen lines of his "Nanlahka" to a eulogy on the pleasures of lying. Shakespeare's characters repeatedly lie. The examples are too well known to need quoting here. It is sufficient for our purpose to note that the so-called classic literature is as replete as Folklore with instances of lying.

Modern literature offers nothing new in the field. Human nature is the same in Kathleen Norris's latest novel as in the Norwegian "Edda," Henry Van Dyke's "Fourth Wise Man" lies to save the life of a child in Bethlehem. Mr. Brittling in H. G. Well's recent successful novel scruples not to evade or lie outright when he deems it expedient. The modern short story as it appears in the popular magazines of to-day is a net work of deceit. Especially is this true since the war has stimulated anew the public's interest in "Spy Stories." The magazines fairly reek with clever and stupid lies. They

are so commonplace as to pass unnoticed unless our attention is directed toward them.

Classic and modern literature, however are of but slight interest to the present study. Most children have their morals in regard to lying fairly well established before they read Shakespeare or Kipling. Its chief interest to us is that it mirrors our own moral life. The classics live because they picture life so truly. Modern fiction is voluminous because we like to read about ourselves. Their lesson should strike home and help us to see more clearly the injury we do one another by so much useless lying. The Folklore and Children's stories have an added significance. They too undoubtedly mirror the life of their makers, but they are early introduced into the child's environment and help materially in determining his ideals. Every parent should know what her child is reading and should evaluate and correct unworthy ideals that may have been expressed in the stories.

Poetry also has its place in the child's environment and should add to, rather than weaken his worthy ideals. Poetic license, figures of speech, fanciful statements should be very carefully explained lest they leave a false impression on the child. One literal minded girl of six years became hopelessly disgusted with her teacher because she used the imaginative method in her nature study work and had the flowers and insects talk. Nothing would make the child believe that the good lady was not a confirmed liar, when a word or two from the teacher at the beginning would have placed the whole study on a play basis and have prevented the difficulty in the child's mind.

IX. Parental Implications

The problem of truth-telling in children is essentially a home problem. No one has so early or so great an influence over the child as the parent. The State seldom assumes any direct responsibility over the child until the school age is reached and habits of lying or truth-telling are fairly well established. The school atmosphere has much to do with the encouragement of the maturing habits and hence the parent owes his child an interest, if not a partial supervision, of the atmosphere of the school in order that the ideals she has endeavored to inculcate are strengthened rather than weakened. In the home the first law is confidence. On it rests all the other virtues. When it is weakened or perverted there is no evident reason to the child why he should not use deception to obtain comfort or escape pain. It is only through confidence in his parent that he learns to evaluate a lie.

No instance of child lying has come to our attention that confidence could not have eliminated.

The parents' judgment of any lie should be based on the motive prompting the deceit. Intellectual deflections should be explained and the power of clear thought educated. Emotional impulsions should be studied and as often forgiven as punished. Willful inventions need even greater study and sympathetic care to overcome the tendency. The parents' only hope of helping the child to form habits of honest thinking and acting lies in a sincere attitude of sympathy in their struggle of adjustment to our ideals. Parents, themselves, are sufficiently involved in these same problems to be able to recognize the difficulties and ought to be filled with the spirit of friendly understanding in dealing with the problem.

Above all, the highest possible interpretation should be placed on any statement a child makes. The word "lie" should be charily used and it should never be forgotten that one lie or even many do not necessarily make a "liar." The assumption on the part of the parent that the child's motive was good tends to lift him to the plane of the belief in him and steady his morals for the next temptation.

Parents should ask as few incriminating questions as possible and these should be worded very carefully so that they will not suggest an untruth to the child or put him on the defensive. Fear, it is to be remembered, is the chief cause of lying and much of the responsibility for it lies in the parents' attitude.

Most of the willful inventions seemed to be the outgrowth of a desire for a greater amount of play activity and since parents determine the amount and variety; it is for them to eliminate the temptation by providing ample time and equipment for this all important activity of childhood. Neither musical attainments nor much book learning can compare in wholesome results with a sufficient amount of ingenuous play.

Lies told between children rest chiefly on a perverted ideal of fair play and gentlemanliness. From an ego-centric infant, the child must grow into a socialized individual. The transformation is necessarily slow. Parents can best offer friendly advice and passionate ideals. By well chosen stories, comments and personal example they can lend their influence on the side of fair play, true friendship and the best in social ideals. They can teach the child man's slow development in morals, of his animal forbears, of his primitive necessities and his gradual growth toward perfection in truth-telling as in other phases of living.

They can explain the principles underlying social standards

and point the child to sincere appreciation rather than censorious judgments of those with whom he comes in contact. In every person there is something to be admired and the habit of looking for the good in each person or situation would save a host of lies. "Finally, brethren, whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report, if there be any virtue and if there be any praise, think on *these* things."

Vocational ideals can be made living timber with which a noble character is built. Literature can be made to strengthen the love of high purpose. Religion can suffuse the whole with the supreme desire of man for perfection. "All men seek after God lest haply they shall find Him." None need faint by the wayside if they guard their daily task. To parents the task of sincere honesty is paramount. Personal example is worth more than ten spoken ideals or a hundred punishments. The weak must needs anchor themselves firmly to truth if they are to attain mature individuality, so children are steadied and strengthened by it in the conduct of all those about them.

The parent who is *truthful, sympathetic* and *seriously interested* in the problems that perplex her child has little to fear from child lying for the recollection of such a friend is a mighty force prompting the child to better and worthier effort at truth. She who accepts every statement of the child's as a confidence from a beloved friend often entertains "an angel unawares," for the two essentials are present—high ideals and loving co-operation.

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THE USE OF OBJECTIVE CRITERIA IN THE MEASURE OF DRAWING ABILITY

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The child-study movement and the interest in children's drawing growing out of it,—the work of Ricci, Barnes, Maitland, Lukens, Kerschensteiner, Levinstein, Rouma, and Luquet have carried the study of children's drawing to a point somewhat beyond the early objectives. The concern to-day is no longer exclusively with questions of spontaneity, stages of development, drawing preferences. Of the problems which are assuming clearer definition the most insistent perhaps is that of the determination of merit in children's drawing. It has been proposed that well-defined objective criteria might be set up by the careful construction and refinement of a "scale" for the measuring of drawing ability. It is the purpose of the present inquiry to examine the assumptions underlying a proposal of this kind, and to estimate the value of the tentative scale that has been produced.

The term "drawing" has several distinct connotations. It is important to distinguish clearly between at least two of these, for from the failure to do so there results a confusion of idea that handicaps every attempt at intelligent discussion. There is, first, the drawing which is *delineation* or an attempt at delineation. Drawing in this sense aims at indicating the outer boundaries of surfaces, the outlines of objects and parts of objects, at abstracting the edges of surfaces. It is a preoccupation with outlines, and the outline has been defined as "a shadow on the edge." The drawing-act so viewed is an attempt at transcription. Its aim is to substitute for a vocabulary of concrete nouns and verbs an alphabet of lines. It seeks to achieve a relatively accurate correspondence between the depiction and the thing depicted. It is not selective; rather is it categorical and objectively illustrative. It intends to do what picture-writing did. With representative drawing in the narrowest definition of that term it has much in common. As soon, however, as intention, or design (in its original meaning), or purpose beyond the mere recording of fact becomes a motive we have a very different product, still called a drawing, yet as far removed from what we here term *delineation* as the process of thinking is removed from the activity of name-matching. It is a distinction fairly well rec-

ognized in other school studies. Reading for thought-getting is no longer confused with word-naming. All the words in the "Ode on A Grecian Urn" may be found in the dictionary; but the lexicographer's law of composition is not the poet's. In the one case there is a single, fixed, commendable but relatively simple aim; the product is a labor of accretion. In the other there is an infinite play of purposes, "a translation from inward to outward," an attempt to achieve perfect accordance to idea; it is an act of composition. Drawing in this second sense can hardly be characterized by a single suggestive epithet for, like literature, it is "an instrument of many stops, meditative, observant, descriptive, eloquent, analytic, plaintive, fervent."

So different are the two connotations of the term and so confusing a failure to keep them distinct, that it may be worth while to consider their implications. It would be well if we had different words; unfortunately the word *design* which might have served as a term correlative to *delineation* has been restricted in its use so that, as now employed, it calls to mind ornamentation, decoration or pattern.

To discover that artists themselves are constantly aware of the distinction one need but turn to the utterances of painters and sculptors. To a painter who exhibited his skill before him, Millet put this question: "It is well, and you can paint.—But what have you to say?" The late John La Farge never tired of warning us that art is not a trade different from others because it requires special skill and is more difficult; to suppose this, he said is "to confuse art with the processes of art." "No genius for painting has ever been given by a knowledge of perspective. . . . The usual belief, the proverbial one, is the belief that we all come to, that rules exist for art, not art for rules. To study any organism we take it to pieces and usually discover its machinery more distinctly in death. A readjustment and juxtaposition of the elements that constituted life does not give life again and make a living unity."[1]

La Farge suggested the kind of questioning that continually goes on in the mind of the artist. "Are these children who are playing in the sunlight or is it a place in the sunlight in which children are playing?" In delineation there is, it is needless to say, no such questioning. Of drawing, particularly of outline-drawing in black on a white ground, La Farge had this to say: "What we apprehend of anything is its full spread, which is always a colored surface, having a

[1] La Farge, John: Considerations on Painting, 1895, pp. 36, 37.

given form,—a modelled pattern, not an outline." "The outline is but a shadow of the edge. This is so true, in our usual way of looking at drawings with little but outline, that when the line is thicker, we feel an intention of representation of shadow."[2] "The glories of nature in which we lose ourselves are not the glories of black and white abstraction." What we see first is not form, but lights, colors. Slyly hinting that there is often danger in attaching too great importance to faithfulness of delineation, La Farge remarks: "To some kinds of intellect certain contradictions to their memories of sight will be so important that these contradictions . . . will prove insurmountable. The remainder of the illusion will not take place with them to a sufficient extent to move the entire mind. It may come from too much ignorance; it may come from too oppressive a knowledge of certain facts. We should be troubled by Shakespear's geography, by his statements of historic fact, and the characters he builds, were we not, fortunately for our appreciation of what he meant, bowed down into the right attitude by the pressure of long continued opinion. I think I can remember my professor of anatomy's objection to the Venus of Milo, about whose hips he had much misgiving."[3] Composition, he defined as "our way of looking at things. . . . So that it might be said that we compose in our way of looking at nature, without ever thinking of any copy, any imitation of this appearance of nature in art."

Vincent Von Gogh in a letter to his brother writes: "Tell Seurat that I should despair if my figures were correct; tell him that if you take a photograph of a man digging, in my opinion he is sure to look as if he were not digging; tell him that I think Michael Angelo's figures magnificent, even though the legs are certainly too long, and the hips and the pelvis bones a little too broad; tell him that in my opinion Millet and Lhermitte are the true painters of the day, because they do not paint things as they are, dryly analysing them and observing them objectively, but render them as they feel them; tell him that it is my most fervent desire to know how one can achieve such deviations from reality, such inaccuracies and such transfigurations."[4]

There is evidently no confusion in the mind of the artists between transcriptive and expressive depiction. It does not follow that we need attach to the two kinds of drawing the same relative importance that they do. But it is imperative

[2] La Farge, John: Op. cit. p. 102.
[3] La Farge, John: Op. cit. p. 129 *et seq.*
[4] The letters of a Post-Impressionist; Being the Familiar Letters of Vincent Von Gogh, translated by A. M. Ludovici, 1912. Pp. 84, 85.

that we avoid speaking and writing of the two as though they were one; most important of all is it that we cease thinking of them as of a single kind of activity.

Some years ago Madame Albert Besnard[5] submitted a collection of children's spontaneous drawings to a jury composed of "artistes, universitaires, psychologues, simples mondaines, philanthrops," and returned with the verdict that children below the age of eight draw better than those between the ages of eight and twelve. One can only conclude that the word drawing is used by her as by Chesneau, to refer to one thing; that the same word employed by Karrenberg, Thorndike, Kerschensteiner refers to an activity quite different.

It seems late in the day and uncalled for, perhaps, to ask, before proceeding to a discussion of drawing abilities, "Precisely what is it that we mean when we speak of good drawing or poor drawing?" It has been generally assumed by writers on the pedagogy of the subject that there are no differences, at least no considerable differences of opinion here; so that one writer assures us that he found children under the influence of this or that system of instruction improving in their work, while another appears with testimony that is flatly contradictory. What is one going to do when Tadd[6] complains that "no more than four per cent of the drawing teachers who were tested could draw," and Mme. Besnard in voicing the judgment of a heterogeneous group of critics tells us that children draw well, but that adults have forgotten how and have ceased to draw?

It seems that one can do no better than to turn for enlightenment to the artists themselves, more especially to those who have committed their judgment to writing, for to these no one (not even that inveterate enemy of critics, Mr. Whistler) has yet denied the right to speak within their province.

"Good drawing is drawing that can not be altered without destruction of its correctness as anatomy, botany, or any other science." So says Wassily Kandinsky. But, he adds, "the artist must have something to say, for mastery over form is not his goal but rather the adapting of form to its inner meaning."[7]

"It is difficult to correct the errors that prevail on the subject of drawing. It is a false idea that drawing in itself can be beautiful. It is only beautiful through the truths and

[5] Besnard, Mme. Albert: Dessins d'Enfants. La Revue Universelle, Aug. 1901.

[6] Tadd, J. Liberty: New Methods in Education, p. 35.

[7] Kandinsky, Wassily: The Art of Spiritual Harmony, translated by M. T. H. Sadler, 1914, p. 105.

the feelings that it translates. . . . You never think of praising either drawing or style which is truly beautiful because you are carried away by the interest of all that they express. It is the same with color. There is really neither beautiful style, nor beautiful drawing, nor beautiful color; there is but one sole beauty, that of the truth which is revealed. When a truth, when a profound idea, when a powerful feeling bursts forth in a great work, either literary or artistic, it is evident that the style, or the color and the drawing are excellent; but these qualities exist only as the reflection of the truth."[8]

Again Rodin says: "If the artist only reproduces superficial features as photography does, if he copies the lineaments of a face exactly, without reference to character, he deserves no admiration. . . . In a word, all the features must be expressive."[9] The purest works are "those in which one finds no inexpressive waste of forms, lines, and colors, but where all, absolutely all, expresses thought and soul." Perhaps the following quotation will reveal the spirit of Rodin's criticism, regardless of whether the thing judged is a canvas by Goya or a child's drawing. "There is nothing ugly in art except that which is without character, that is to say, that which offers no outer or inner truth. And as it is solely the power of *character* which makes for beauty in art, it often happens that the uglier a being is in nature, the more beautiful it becomes in art. Whatever is false, whatever is artificial, whatever seeks to be pretty rather than expressive, whatever is capricious and affected, whatever smiles without motive, bends or struts without cause, is mannered without reason; all that is without soul and without truth; all that is a *parade* of beauty and grace, all, in short, that lies, is *ugliness* in art."[10]

"This form of art-teaching," i. e., drawing, wrote the late Kenyon Cox, "is especially fitted to promote . . . the training of eye and hand and the providing of useful tools for the life work of the student. Drawing as a training of eye and hand is a kind of physical culture. It sharpens the sense, broadens the powers, and stimulates the observation and the intelligence, making of the student a finer and in every way more efficient being than he could become without it. Drawing is also in many walks of life an indispensable tool and I can imagine no walk in which the power of ex-

[8] Rodin, Auguste. Art. (Edited by Paul Gsell.) Translated by Mrs. R. Fedden, 1912, pp. 97 *et seq.*

[9] Rodin, Auguste: Op. cit. p. 130.

[10] Rodin, Auguste: Op. cit. p. 45.

pressing oneself with lines might not occasionally be of the utmost service. Therefore I consider the teaching of drawing a most important part of a good general education."[11] Accordingly there was never any questions in the mind of a student of the late Kenyon Cox about what his teacher would consider commendable or reprehensible in a drawing. A drawing was excellent in precisely the measure in which it was able to reflect a faithful imaging of the subject.

On the other hand, Albert Gleizes and Jean Metzinger complain of "servile repetitions" and condemn draughtsman and painters for being "slaves of the worst visual conventions." "Painting is not . . . the art of imitating an object by means of lines and colors." "Let the picture imitate nothing; let it nakedly present its motive. . . ." In criticism of the work of a fellow-painter, Metzinger has this to say: "Unaware of the fact that in order to display a true relation we must be ready to sacrifice a thousand *apparent* truths, (Courbet) accepted without the slightest intellectual control, all that his retina presented to him."[12] Aimed directly at the correct drawing of the schoolroom and academy is the following: "We know that the most serious infractions of the rules of perspective will by no means compromise the spatiality of a painted work. The Chinese painters evoke space, although they exhibit a strong partiality for *divergence.*" But these men, it may be urged, are spokesmen for a special cult.

Mr. George Moore, better known by the world for his realistic fiction than for his painting, wrote some thirty years ago his "Modern Painting" in which he contends that the idea that correspondence to the object is an essential quality of good drawing, is the "blight that has fallen on European art." "The goodness or the badness of a drawing exists independently of the thing copied." The following, from the work referred to may serve to make his meaning clearer. "Looking at this yard of colored print, I ask myself how it is that ever since art began no such admirable result has been obtained with means so slight. A few outlines drawn with pen and ink or pencil, and the interspaces filled in with two flat tints—a dark green and a grey verging on mauve. The drawing of the figures is marvellously beautiful. But why is it beautiful? Is it because of the individual character represented in the faces? The faces are expressed by means

[11] Cox, Kenyon: Museums of Art and Teachers of Art. In "Art Museums and Schools," 1913, p. 59.

[12] Gleizes, Albert and Metzinger, Jean: Cubism, 1913, p. 11.

of a formula, and are as like one another as a row of eggs. Are the proportions of the figures correctly measured, and are the anatomies well understood? The figures are in the usual proportions so far as the number of heads is concerned; they are all from six and a half to seven heads high; but no motion of limbs happens under the draperies, and the hands and feet, like the faces, are expressed by a set of arbitrary conventions. It is not even easy to determine whether the posture of the woman on the right is intended for sitting or kneeling. She holds a tray on which is an idol, and to provide sufficient balance for the composition the artist has placed a yellow umbrella in the idol's hand. Examine this design from end to end, and nowhere will you find any desire to imitate nature. A line, three or four conventional markings represent a face. No desire to convey the illusion of a rounded face disturbed his mind for a moment; . . . It was no part of their scheme to compete with nature, so it would not occur to them to cover one side of the face with shadow."[13]

Writing of the art of Paul Cezanne, a recent critic with whom iconoclasts find little favor gives it as his opinion that "the directness of Cezanne's painting would appeal to anyone, in whatever station of life or ignorance of art, *as a great simple honesty.*"[14] Here is a virtue about which no mention is made in the drawing curriculum.

Testimony of this sort is not lacking, and it all goes to emphasizing an important truth that has too frequently been ignored, viz., that there is not one kind of *good drawing* but many, that we ought to give up thinking and speaking of drawing-ability as of a relatively simple psycho-physical entity and begin to recognize *drawing-abilities.*

For the "measure" of drawing-achievement, Prof. Thorndike[15] has evolved a scale. The author submitted a series of fifteen spontaneous drawings selected from Kerschensteiner's "Die Entwickelung der zeichneriscen Begabung" to a jury consisting of artists, teachers of art, and students of psychology, and education. Each member of the jury was invited to arrange the drawings in the order of merit. Three hundred and seventy-six ratings were thus secured on the basis of which a scale was constructed for the evaluation of similar drawings. Through the preparation and refining of several such scales, some prepared especially for informational draw-

[13] Moore, George: Modern Painting, 1893.
[14] Poore, Henry R., A. N. A.: New Tendency in Art, 1913, p. 6.
[15] Thorndike, Edward L.: "The Measurement of Achievement in Drawing," Teacher's College Record, Nov. 1913.

ings, some for representative drawings, and some for decorative drawings, the author believes that objective standards may be secured for measuring the quality of children's drawings.

"If a hundred teachers of drawing were asked to state as exactly and clearly as they could the achievement represented by the production of the drawings of Fig. 1,[16] each made in ten minutes with no copy at hand, by a twelve-year-old boy who had the training of grades 1-5 of the New York City schools, many of them would make only such vague, rough statements as "Good," "Fair," "Somewhat above the average," "Satisfactory," and the like. If some of them did give apparently fine estimates, such as "82 by my scale of grading" or "C+ by my scale of grading" or "As good as the work of the thirteenth child from the top in my class of forty," these estimates would not be easily and surely comparable one with another, or with similar estimates concerning other drawings. Each person uses a scale of his own and often a very crude one."

"Consequently although we give in verbal statements and on report cards many millions of measurements of achievement in drawing every year, almost no use is made or can be made of them. A child may learn that his drawings are, in his teachers estimation, better than those of other children in the same class who get lower 'marks;' but he does not know how much better they are. He may be told that his drawings of this week are better than those of last week, but not how much better they are . . ."

"The essential difficulty can be made clear by contrasting the case of drawings produced with that of weight lifted. We can tell just how heavy a weight a child can lift and just how much his gain has been. Any one teacher's measurement of the weight lifted is commensurate with any other teacher's, and any one teacher's measurement for one child with the same teacher's (or any other teacher's) for any other child. We could easily tell whether, age for age, children ten years from now could lift more or less (and, exactly how much more or less) than children of to-day. We could easily compare the results of different systems of physical education upon lifting power. For we have for 'weight lifted' a perfectly adequate scale, starting from zero, and so constructed that any one unit of the scale (pound, ounce, kilogram, or the like) is equal to any other unit. We know what anybody means by 'fifty pounds,' 'sixty pounds,' and the like. Measurements by the scale of weight define the facts

[16] The reference is to drawings in Prof. Thorndike's scale.

in question clearly, exactly and commensurately. For 'merit as a child's drawing' we have no adequate scale; we do not know what 'zero' merit as a child's drawing is, nor have we drawings at hand representing 1, 2, 3, 4, 5, etc., degrees of merit varying by equal steps of difference as 1, 2, 3, 4, and 5 pounds represent degrees of weight varying by equal steps."

The provisional scale is an attempt to meet the need for such a measuring-device. The drawings were submitted to each judge with the request that they be arranged and numbered in the order of excellence. "In ranking these drawings," wrote the author, "do not make any allowance for the apparent age or training of those who drew them, but consider them all by the same standard; rate them for their intrinsic merit as drawings."

It is Prof. Thorndike's avowed purpose "to present a provisional scale by which achievement and improvement in drawing can be measured with somewhat the same clearness, exactness, and commensurability as achievement and improvement in lifting weights." The scheme seems simple enough. We measure spelling-efficiency, penmanship-efficiency, proficiency in the arithmetic fundamentals, why not "measure" drawing-efficiency? I believe that we are to be denied the comfort that such a scale promises, for the twofold reason that it is neither worth having nor possible to secure.

It is not worth having. What service is it to render? What teacher of drawing would send a child to discover his own place in a drawing-efficiency ladder? The teacher who is concerned with drawing-efficiency. But we have no business to be concerned with drawing-efficiency. Who aims to produce a race of illustrators? The artists do not desire it. The world is not hungering for the want of men who can tell stories in pictures. The common school does not aim at producing draughtsmen except when, mistaking the means for the end, it sets out to teach children the little parlor trick of making pictures. All this invites a survey to discern once more the ends toward which instruction in the arts is headed. Why is drawing taught at all?

It is the aim which, more than any other factor in teaching, determines not only the result but the attendant processes of instruction and learning. Class-room procedure is rooted in the reasons that dictate the inclusion of a subject for study in the curriculum. What then are the motives that prompt us to teach drawing in the schools? There is not complete accord here.

Jean-Jacques Rousseau wanted it because it afforded oppor-

tunities for combining sense perception and motor activity. "I would have my pupil cultivate this art (drawing), not exactly for the art itself, but for rendering the eye accurate and the hand flexible. . . . I shall take great care therefore not to give him a drawing master who will give him only imitations to imitate. . . . I am aware that in this way he will scrawl for a long time without making anything that is recognizable; that he will be late in catching the elegance of contours . . . but by way of compensation he will certainly contract a juster glance of the eye, a steadier hand, a knowledge of the true relations of volume and form existing in animals, plants and natural bodies, and the more ready use of the play of perspective." In the name of "from simple to complex" and object teaching, Pestalozzi arranged an "alphabet of form"; Calkins, Mayo and Smith prepared textbooks based on these principles. Traces of the influence of this viewpoint still appear in many systems (for example in that of Tadd), and in the persistent tendency to render instruction severely logical. We have seen that not everyone has yet abandoned this aim as the paramount issue. The late Kenyon Cox would still have drawing taught for the training of eye and hand that it affords. We teach drawing to accustom "*the child to observe carefully* what is brought before him, to note the relative importance of the various parts, to compare one thing with another, to estimate distances and proportions, and to recognize how known elements may be combined into new forms." To-day, however, we almost invariably find a statement of purposes that transcends these formal ends while embracing them. It is worth noting however, that even in these modest claims for the value of drawing and in these least aspiring enunciations of its purpose, the conception is dynamic; the center of interest is not the drawing but the *developing* child. Its preoccupation is with the process of perceptual metabolism, not with the drawing product.

But there is a hierarchy of aims. "A universal and comprehensive plan of human education must, therefore, necessarily consider at an early period, singing, drawing, painting and modelling; . . . Its intention will be not to make each pupil an artist in some one or all of the arts, but to secure to each human being full and all-sided development, to enable him to see man in the universality and all-sided energy of his nature, and particularly, to enable him to understand and appreciate the products of true art." "To witness this spectacle (of life and nature) with appropriate emotion is the aim of all culture."

"The real test of value for the masses of our pupils in this department is thus the formation of good taste in selecting, and capacity to enjoy works of art wherever they touch life."

Dewey and Parker hold that art education has a social purpose: the spread of emotional moods that will bring about unified action. The emotional attitude is contagious and is therefore able through the social reminiscences which it provokes to secure concerted opinion and action.

From the educators and the artists we gather that drawing, in so far as it contributes to art education aims at sense training, and at motor training; that it serves as preparation for special activities, and as such becomes a supplementary vocational training—an introduction to the industrial and applied arts; that it should endow the child with some part of his aesthetic heritage through the cultivation of taste and appreciation; that it possesses social values; that it may become a potent factor not only in refining perceptual acumen but that it may be carried on to a higher plane where its aspiration becomes development, intellectual as well as emotional,—where it aims at a mental rather than at an optical awakening. We are given to understand that art is not an industry or a by-product or even a product but a manifestation and a mystery; that being part of the "spiritual output of the racial soul" it may justly claim a position co-ordinate with the other "essentials" of learning, as an indispensable feature in a complete curriculum. Art belongs in the school because it is "a great language for the voicing of greatest things, a language for which there is no substitute; and he who is not learned therein either in its active or its passive aspect is to that extent ignorant, unlearned, uncultured."

Between these aims there is no conflict; there is only a shifting of emphasis. They are all dynamic. In no instance is there a preoccupation with results. *It is always the question of what is to be gotten through drawing, never a question of what kind of drawing to get.* The scale, on the other hand, focuses attention on the result. Its employment would commit us to a way of thinking about children's drawings that is deadly to the spirit and perversive to the form. The employment of a weighted scale can be justified only after it has been established that the work to be judged by the scale is, on its very face, an adequate presentment and a complete history. If a child's drawing could tell us how it came to be conceived, the story of its progress from the moment of its inception to the completion, the measure of the young artist's indebtedness to his neighbors or to his teacher or to a copy,

Fig. III

Fig. II

Fig. I

to what extent his achievement approximates his intention, just what the child sought to accomplish, and his own estimate of his success or failure,—if a drawing *per se* could tell us something of these things, the use of an objective criterion for determining merit would require no justification.

About a century ago an English critic dismissed the strange melodies of a budding poet with a curt, "This will never do!" But the judicial mode in criticism has given way to the comparative and historical method. Stated vulgarly, it is no longer permissible to berate a potato for not being a cabbage. And there is no turning back. We look at a finished painter's work and evaluate it in the light of the artist's purpose and with a lively realization of his indebtedness to others. No man in Michael Angelo's day knew some of the facts about pigment and color that to-day constitute the common equipment of youthful academicians. In judging the work of the mature artist one takes for granted the debt to the past. Criticism proceeds to evaluate the painting in terms of the artist's antecedents, in terms of the hour of his appearance and of his avowed intention. This is the comparative method. But in judging the merit of a child's effort we can not safely *assume* anything very definite about the training or the purpose or the influences that may have been operative—that is, we cannot surmise these things by merely looking at the drawing. Here[17] are three still-life pictures. No exclusively objective criterion can help us to estimate their values properly. All three were "done" from the object without instructions or correction. They are not copies of other pictures. In the case of two of them the teacher presented the group, requesting that the children make faithful drawings in color of the objects selected. The third is one of the glories of a master painter, Henri Rousseau. No scale can estimate the three at their relative merit, for their merits are not all stamped on their countenances. What the two children's drawings do not disclose is that it was Rousseau who helped discover for us the beauty of such grouping, that it was he who helped convert us to a new way of looking at these simple things; Rousseau contributed the composition. The teacher composed at Rousseau's dictation, but contributed an act of selection, for the subject was chosen out of a host of possible subjects. The pupil, whether he knew it or not, performed a task "under dictation." But is it to the opportunities that are afforded for this kind of formal training in the performance of set tasks that drawing owes its place in our curricula? If it does, we

[17] Figs. 1, 2, and 3.

ought to call it frankly a gymnastic of the eye and hand, and stop solacing ourselves with the delusion that this study is being made to serve nobler purposes, that it furnishes us one of the few opportunities for arousing dormant potentialities, for bestowing a birthright, and for converting in some measure into an artist, a child who might otherwise become a drudge or a drone. For the word *artist,* let it not be forgotten should mean to us what it meant to Rodin, "the man who takes pleasure in what he does."

We may not any more judge a child by our standards in drawing than in the law court. "If we stop to think of the way in which the intelligence of pupils was judged up to only a few years ago, according to the pedagogic methods that were a remnant of the pietistic schools, we will be able to form some idea. The more intelligent ones were those best able to recite dogmatic truths from memory, and even to-day we have not advanced very far above that level. As a general rule that pupil is considered the most intelligent who best succeeds in echoing his teacher and in modelling his own personality as closely as possible upon that of his preceptor."[18]

Criticism and correction should occupy a larger place proportionally in art instruction. Studies of children's tastes in color, form, and composition at different stages in their growth is what we need. For our unswerving (though narrowing) fealty to the representative ideal in drawing and for assuming to be the sole critics in the class-room, we pay the penalty of not knowing the child's tastes and potentialities. Ruskin held that children should be permitted the voluntary practice of art and that alone. Is it not possible that this voluntary practice may be stimulated more effectively by indirection and suggestion than by direct categorical methods?

What is needed in criticism is not a rigid system but an adjustable scheme with many variants. Expression can not be taught; it can only be evoked, and it will not be evóked unless each lesson is an opportunity for the exercise of individual judgment, for the disclosure of an individual preference, for the accomplishment of a *self-chosen* task. There will be nothing worth criticizing if conditions under which drawings are made are such as to deny this opportunity. We can not afford to treat this study as a prescriptive exercise, and it may be said perhaps that a lesson in drawing which does not permit the pupil to register some personal choice is a lesson in dictation. "The school's whole theory of trans-

[18] Montessori, M.: Pedagogical Anthropology, 1913, pp. 252-3.

mitting art from class-room to adult life will need to be changed. The present belief is that the child can be put through adult ways of doing things and, finally, when he has become a full-fledged member of society, be counted an art-devotee. The futility of such dogma has already been made apparent in intellectual teaching. Its futility is even more obvious when applied to the training of the sensibilities."[19]

Correction and criticism has concerned itself too frequently with that mythical entity, the "average" child. Experimental investigations, too, being for the most part quantitative in nature have dealt most often with those individuals that constitute the middle bulk of the observation frequency polygon; of the others we learn only that they exist and are in the minority. Yet it is this minority and the singular exceptions whose behavior furnishes the key for the understanding of the rest. "In the school, we have hitherto retained, almost as a principle of justice, a leveling uniformity among the pupils: an abstract equality which seeks to guide all these separate childish individualities toward a single type which can not be called an idealized type, because it does not represent a standard of perfection, but is on the contrary a non-existent philosophical abstraction: the *child.* Educators are prepared for their practical services to childhood, based upon this abstract infantile personality; and they enter upon their active work in school with the preconception that they must discover in every pupil a more or less faithful incarnation of the said type; and thus, year after year, they delude themselves with the idea that they have understood and educated the *child.*"[20]

I have attempted to suggest that the term "drawing" requires definition; that a fundamental distinction should be made between transcriptive drawing or *delineation,* and expressive drawing or *design;* that in the light of those considerations which are responsible for the subject's inclusion in the curriculum, our concern is with the purposeful activity of the latter kind; that the employment of a scale or any other severely objective standard, because its concern is with the drawing product rather than with processes, is at once inadequate and undesirable; that criticism here as in the other arts might profitably adopt the comparative and historical methods.

[19] Suzallo, Henry: In editor's introduction to H. T. Bailey's "Art Education," 1914, p. viii.

[20] Montessori, op. cit. p. 15.

THE FRINGE OF A UNIVERSITY

By Harlow Gale

Around the border of our American universities with a couple of generations' age there is gathering more and more an honorary collegiate colony, marked by specially interesting psychological traits. Our oldest colleges in New England have long glowed with a halo of literary and historical fame. Harvard is more famed for its life-long sons and neighbors, Emerson, Longfellow, Holmes, Lowell, Motley, Bancroft, Fiske and Adams, than for its own professional academic family. Those beacon lights of the highest types of American culture in Presidents Eliot and White have radiated far wider during their emeritus than during their active official lives. The Yale freshman's first duty of respect and awe has long been to hunt up the homes of Noah Webster, Eli Whitney, the bachelor mansion of the paleontologist recluse O. C. Marsh, and the famous cave retreat on West Rock of the three regicide judges, Whalley, Dixwell and Goffe. The English prototypes of our colleges have each its attendant bodies, some merely reflecting university light, and some being self-luminous.

About our American universities there has been a late accretion of a new genus, the barnacle Carnegiensis. Two varieties can be distinguished: the embalmed and the vital. Those teachers who demand their retirement pension at the earliest legal opportunity, who suddenly drop their life work of education and are never again seen upon the campus, who continue their utter indifference to public and civic affairs, who putter in odd jobs about their homes and arrange their vegetative program of inactivity to draw their pensions as long as possible for themselves and their drone families,—such academic pensioners are embalmed. More probably they consider themselves as having earned a cocoon rest from the duties of instruction in preparation for the heavenly transformation into the eternal rewards.

The sturdy and taut figure, topped by the rewarded and contented face of the retired professor of Latin, is seen outside his premises only when he takes his semi-weekly constitutional over to the city or his faithful Sunday morning and Thursday evening pilgrimage to his red brick Baptist church. A curious spectator of these mechanical actions has never been able to discover any psychological association between these

walks and Virgil, Horace, Catullus and Lucretius. He is rather the type of the armoured and impervious personality developed by our Puritan disciplinary educational heritage. For the cosmopolitan breadth, poetic grace and charity, scientific sanity, and the imaginative gods from human prototypes, all so richly embodied in the Latin literature he has taught for a generation, have had no perceptible influence on the teacher's personality and life. He is still the primitive backwoodsman in all social and cultural charms. He reads nothing, he cannot converse, music and art are to him feminine weaknesses, civic and national problems have no interest for him beyond voting the straight Republican ticket. He has done his duty faithfully in making boys study things and by methods they disliked and despised, he has earned his reward, shut up his books for good, forgot his former pupils and colleagues, his final holiday has come, now for the providential pension and a grand loaf!

The always smiling faces of the retired professors of Physics and of Electrical Engineering spread a mild glow over a very limited border of the university. For the physicist, who had long ago confessed that he might just as well have made his living teaching any one of a dozen other subjects, had stuck it out to his pension age limit. The wondrous physical structure of the universe, if it ever had any deep intellectual interest for him, was now quite indifferent. His only continued interest in the humanity about him was his continued zeal in opposing the lending of library books and the use of tobacco on the campus or in the fraternity houses. His electrical comrade in cheerfulness still spoke very softly, but blew his trombone with orthodox vigor in the Methodist Sunday school.

The corpulent president emeritus, who had been a skillful political lay-brother buffer between the departmental ambitions and jealousies of the loose conglomerate of schools and faculties, is now at peace with man and the world. As he had no more plan of education than his plumping down each new building of different architecture on any chance campus spot, so he now takes no interest in the building plan of the enlarged campus or in the modern unified university spirit. After having always laughed at the laboratories and scientific equipment on his annual official rounds of inspection, and shown any serious interest in only the rhetoric department and the Y. M. C. A., he naturally had no bonds of community and sympathy with his former colleagues in education. Some native democratic sympathy with freshmen, to whom he was more accessible than to the importuning and intriguing heads

of departments, gave him a rural reputation as a great educator. But he now vegetates at home, lamenting that the world of faith and discipline and the Grand Old Party were going to the dogs, while he consoled himself with the apostle's self-satisfied faith, "I am now ready to be offered, and the time of my departure is at hand. I have fought the good fight, I have finished my course, I have kept the faith: henceforth there is laid up for me a crown of righteousness, which the Lord, the righteous judge, shall give me at that day; and not to me only, but to all them also that love his appearing."

Another variety of the embalmed pensioner is the professor of philosophy. Tall and gaunt, slow and cautious, guided by the diminutive dinosaur head and blinking eyes, the emeritus professor of philosophy came into his position of guidance and trust from a Congregational pulpit. "Safety first" was his motto. He is no innovator, for his type of philosophy and teaching was classically described three quarters of a century ago in Schaupenhauer's famous portrait of Hegel in the preface to the second edition of his "World as Will and Idea:"—That alma mater, good, nourishing university philosophy, which tacks ahead circumspectly laboring on its way, loaded down with a hundred cautions and a thousand backglances, as it has constantly before its eyes the fear of the Lord, the will of the ministry, the rules of the established church, the wishes of the publisher, the praise of the students, the good will of colleagues, the trend of the day's politics, the momentary pulse of the public, and heaven knows what!" The only occasions when he showed animation or interest in his teaching was in championing the three ideas of pure reason, God, Freedom, and Immortality, against Kant himself. Any trace of opposition from his students on these points put a quiver in his voice and moisture in his eyes with righteous anger. Though he was suspected of personal unitarian tendencies, he always hid these behind the safer shield of orthodox theology. Thus he had missed the beautiful pantheistic serenity of Spinoza's life, the clear vision of Locke, the prophetic keenness of Hume, the sturdy independence of Kant, the virile suggestiveness of Schaupenhauer, the emancipating breadth of Emerson, and the poetic zeal of Royce. All these biographical, psychologically critical, and poetically metaphorical elements in the history of philosophy, which constitute its only lasting value in education as literature and psychology, were hidden beneath the disciplinary scarecrow of apodictic metaphysics.

These hard, mercenary and unsympathetic traits of the philosopher's teaching were naturally concentrated in his re-

tired character. While many severe teachers soften with age, this is not the tendency with professional philosophers. As this typical sample used to grin sheepishly, when asked by his seminar students as to his vacation activities, and reply "Making books," so his pensioned leisure inflicted a long addition to the dreary, utterly uncalled-for Introductions to Philosophy: A Safe Manual for Students, The Philosophic Basis of Theism, Epistemology and Theology, Escatology and Revelation, The Futility of the "Higher Criticism," A Defense of the Three Ideas of Pure Reason, The Physiological Psychology of the Soul: An Apodictic Refutation of Materialism. Books with such imposing metaphysical titles had to be bought by all respectable libraries, though scarcely anyone but timid theological students ever read them. But their author's declining years were comforted by this extra income which he invested in ramshackle tenements out west and by driving hard bargains at a safe distance with his suffering tenants. No one loved this gaunt philosopher, or even respected him; at most he was industrious and thrifty.

In happy contrast to this petty, selfish and mercenary philosopher was the truly philosophic emeritus professor of history, the ideal of the vital type of the university pensioner. He had always showed to his wide academic world a deep sympathy and active aid in all progressive causes. He was the leader of the few professors who took any interest in political and social questions. A new home-rule charter, the control and acquisition of public utilities, a revision of the public school system, state insurance, civil service, the dethroning of the liquor powers, land taxation, socialism, democratic principles versus the monopolistic G. O. P., the gold standard versus bimetalism, the roots and aims of the World War,—all these practical and great causes had found in this historian a wise councillor and righteous fighter. The only religious establishment he had upheld was the small and unfashionable little unitarian church which had become an Emersonian society for ethical culture and a coaling station for all public reform causes. His text books on ancient, modern and United State history, while incidentally keeping his huge and wonderful family free from the nagging cares of academic poverty, were exercising a most liberalizing education on thousands of high school and college students. As can be readily surmised, this very live teacher had been forced to fight valiantly for maintaining his academic position. But he had won his independence and leadership in his department and university by his administrative sense and tact, by his deep learning and broad culture, his catholic openness

and fairness, his generous sympathy, and energetic efficiency. In his pensioned leisure he had added a Cincinnatus rôle by venting some of his superabundant energy, along with that of his second crop of boys, on a farm up among the pine trees. But he continued to be the wise councillor and generous friend to many an aspiring instructor, the leader in the brave vanguard of political and social idealists. Sophisticated undergraduates laughed at his baggy trousers and weather-beaten hat; but all within touch of his coruscating mind and magnetic heart honored the righteous and fearless venerable scholar and loved the great man.

On the other side of the block from the embalmed emeritus president, opposite the official mansion of the active president of the university, lives another emeritus president of the vital type. Despite his nearly 90 years his daily constitutional inspires all students by his military erectness and elastic step. Likewise his mental vigor and enthusiasm form a true halo about a genuine scholar. Instead of indolently lamenting over the world's progress, like his emeritus colleague with ten less years, this far younger scholarly spirit worked daily at his classical history of his state. From bushels of pamphlets and newspaper clippings, gathered by the state historical society from the sweepings of the practical political editors, the venerable political economist would sift out the few valuable testimonies to the erratic workings of pioneer politics. How heartily he would laugh, when a visitor found him patiently pawing over this historical dust heap, at the vagaries, political trickery, and pompous rhetorical bluff of the frontier founders of the state! With kindly irony he would sketch their double-dealing, log-rolling, country newspaper harangues, and stagey oratorical kind of primitive statesmanship. "What's in it for me?" the real, tho veiled, touchstone of all practical politics based on competition business principles, and secret favoritism to the few against the laws,—these two fundamental motives of the politicians were shown up with a gentlemanly independence, refined from a sturdy righteousness and a pedagogic humor. This rare academic composite, quite akin to the honored leadership of President Eliot, radiated also from his collected economic essays on the Ethics of Business, Trusts, The Single Tax, Socialism True and False, and The New Economics.

As the moving spirit and first president of the Fine Arts Society nearly a half century before, this pioneer university president's influence for liberal culture had wholesomely affected the whole city, as well as his academic circles. The opening fate theme of Beethoven's Fifth Symphony had been

marvelled over from his pocket note book with many a musical enthusiast. The long series of exhibitions of paintings, the growth of the Art Institute and of private galleries lead him to a patient consideration of even such art extremes as the poster craze, the cubists and the futurists. Most of all, his truest type of cultural education showed itself in his generous sympathy and interest in whatever interested his visitor. Instead of being narrowed to his own academic specialty, stolidly or contemptuously indifferent to the rest of the great world, as are too many academic manikins, he would graciously and intelligently respond to any personal subject "from Plato to hog cholera," as his presidential successor scornfully termed such scholarly catholicity.

In the more decorative edging of a university gathers a picturesque colony of academic rebels. As they are also without the parental fold of the Carnegie pensions their material conditions, as well as their intellectual traits, keep them most decidedly alive. The nestor of this unorthodox university fringe may be the state geologist, who was so absorbed in the maze of professional and practical geological problems in a frontier state as naturally to lose interest in the conventional disciplinary grind of teaching unwilling boys and girls. For this neglect, or for lukewarmness to administrative committee meetings, he was engineered out of his head professorship by his scheming subordinate and a *laissez-faire* board of regents. With true scientific magnanimity he quickly forgot this shameful treatment and never referred to it during his succeeding 30 years as state geologist and paleontologist of the state historical society. Most zealously did he throw himself into the exploration of every remotest county of his state. He measured the recession of falls which were thus found to have used some 8,000 years to cut a five mile gorge. Every artesian well, discovery of bones, oil or minerals had a magnetic and instantaneous attraction for him. Particularly was he fascinated by every possible evidence as to our pre-Indian ancestors and the consequent enlarged perspective on the antiquity of man. He would be one of the first pilgrims to any neighboring state where paleolithic human skulls and bones were found. His photographs, lantern slides, and lectures on our prehistoric ancestors were seen and heard with intense interest and respect in many an academy of science or scientific assembly. But such subjects were not considered safe or in good form in his former university. Through his wide-reaching geological journal, which he edited with an associate board and published for many years, and by his faithful attendance and participation in the annual

meetings of the A. A. A. S. he kept abreast of the progress of his science and in friendly touch with its best men. And yet his scientific democracy was beautifully shown by his having been the moving spirit in founding a little academy of science with a few natural history enthusiasts among a frontier town's physicians and school teachers. These he had gathered together on his first coming to his new university position and he continued as their leader and inspirer in their modest meetings of self-education for over 40 years. In his beautiful home overlooking his geologic river gorge, and in his labyrinth of private laboratory, dark room, library and study, he lived an ideal life as an independent student of science. He was so much bigger in every scientific caliber than his university-tethered geologists that he was the ideal of his city, state and region as an altruistic, chivalrous free knight of science. Few of the university fringe, alas, discovered this retired, beautiful character and ideal of scientific culture, but to the esoteric few the zeal, bigness and modesty of this independent geologist was a benignant blessing.

Another unorthodox blessing may be a vigorous spinster professor of rhetoric, who was similarly pushed out of the university because she was a leader rather than a driver of young people and took them on wonderful side excursions into real literature and, by means of her own collection of lantern slides, into the world's great art galleries. She was not a Ph. D., had never dug for an underground connection between Chaucer and Nicollette, or counted the aristocratic hyperboles in Kate Douglass Wiggins. But the university had no sooner barred from its campus this strong, original and inspiring personality than she was continually called to lead clubs of working girls, suffragists, art study, Stevenson, Tennyson, anti-tuberculosis, and Americanization. Her sterling enthusiasm and militant righteousness warmed more hearts and formed more helpful association tracts in the cortex of her multitude of hearers than a whole staff of properly accredited university extension lecturers.

As a complement to this spinster's ascetic crusader's zeal for popular education is the fine-grained "old girl" bachelor in the English department who was ostracized by the college for joining the improper free-verse movement and for romantically marrying his vivacious Celtic girl assistant. Although he had been long held within conventional bounds by his concentrated Puritan pedigree, his gradual neglect of church services, and, finally, his mild, open-eyed confession that he could hardly be longer classed as a Christian brought him under academic suspicion. That a researcher in Newman,

Meredith, and James should apparently suddenly write free-verse, should spend his vacations consorting with its apostles, should let them encourage his dreamed-of marriage with a girl young enough to be his daughter, and should clandestinely have this poetic rite performed as a civil function in a distant town with only free-verse poets for witnesses and abettors,—this was too much for university propriety. So the banned poetic lovers retired into the shielding shadow of the fringe, lived an idyllic life of study and writing, marched forth at the end of each day for their constitutional and their Bohemian dinner over in the city, and returned joyfully to perfect bliss. Even student curiosity had a secret suspicion, as it watched this modernized Hermann and Dorothea, *"Also gingen die zwei entgegen der sinkenden Sonne,"* and a few admitted intimates of the poetic couple were certain, that these unconventional lovers were living the real life.

Then there was the bird romanticist, "Dr. Tom," who had courted and photographed all the birds of his state during every vacation moment amid a generation's most useful medical practice. His wonderful collection of eggs, skins, and photographs he had gradually given to the university, so that, when he could retire from practice and devote the rest of his life to his beloved birds, the university courteously gave him an honorary loft in the top of the zoology building. Here he built up a wonderful natural history museum of birds, beavers, deer, etc., mainly through the contributions of specimens and money by wealthy sportsmen and amateur naturalists. Thus this most artistic and instructive exhibition in the fringe of the university was due to extra-academic enthusiasm and devotion.

Not all the academic rebels in the university margin are as benignly free as the foregoing from the instincts of self-defense and revenge. There is the ardent young paleontologist whose ideo-motor reactions were so vigorous and unconditioned that a new head of his department delivered an ultimatum,—"one of us must go." But the combative instincts of the struggle for existence in his paleozoic monster ancestors were so concentrated in the student of their fossils and bones that he was a cantankerous fighter for academic freedom. How racily he lampooned the cautious circumspection of his scientific chief. Schopenhauer's pen was mild compared to the paleontologist's tongue. Plenty of commercial jobs were found for his livelihood and boundless scientific energy in surveys of soil, or for oil or minerals; but his morbid delusions of persecution vented itself in his huge fun at ridiculing and anathematizing his former chief and the uni-

versity authorities who decided which member of the geological faculty "must go."

An American professor of French, dismissed "for the good of the service," turned his persuasive as well as vitrolic tongue and magnetic personality into politics, became one of the highest officials of the state, and had great glee in turning the tables on his former masters by keeping them long at attention and weary with salutes before his official sanctum in the penumbra of the fringe.

A more subtile form of revenge was unconsciously adopted by the psychologist who was dismissed as a "stench in the nostrils" of the president, because of his materialism and lax discipline. With a heavy heart he had put away the wonderful collection of brain slides he had nearly died making in Leipzig, to show somewhat of the inconceivable complexity of the modern histology of the brain. The complete causal dependence of our mental life on this marvelously intricate and delicate mechanism was not questioned by this psychologist any more than by all brain specialists. All the evidence likewise from evolution, animal psychology, child study, fatigue, disease, insanity, old age and death, pointed overwhelmingly to a causal nexus between the brain and mind. Against this the verbal dialectics of metaphysics, the dogmas of theology, the pitiful illusions of spiritualism, the negative results of the best workers in psychical research offered no appreciable counter evidence.

But along with this kind of scientific materialism, which he felt bound to present impartially, the banned psychologist objected strenuously to the usual implied derogatory ethical connotation of materialism. He showed an instinctive retaliation and even spite in showing up the official academic sponsors of idealism, the theological president and the professors of philosophy, as merely verbal idealists, but as practical ethical materialists. For they all took the easiest way to the material necessities and rewards of life by imitation and conformity; they showed no ideals of conduct which required some sacrifice or struggle. In showing his personal contempt for such mercenary professors of verbal idealism and ethical materialism, he was quite priggish and disdainfully superior. His written castigations of orthodox officialism and discipline showed a malicious glee. When a moving picture lecture on the Mawson Antarctic Expedition was given in the university, arranged and financed by "Dr. Tom," this pestiferous psychologist, who happened to have lately gone over all the polar exploration books for their own fascination and for a professional study, took a priggish pleasure in calling attention

to the fact that the university library did not possess a copy of Mawson's "Home of the Blizzard," not to mention Scott, Shackelton, Priestly, Amundson, nor the splendid old Sir John Franklin, Parry and their scores of heroes down to Nansen. And he took ironical delight in asking why such heroes and important discoveries are not included in some scheme of education. To clap the climax to many such insults he finally gave his collection of brain micro-photographs and brain works in French, German, and Italian to the psychological and medical departments to show them their ignorance of these wonders, and likewise his extensive library of chamber music and songs to show what the music department was missing.

Yet it must be said in justice to such pestiferous revenge on the official guardians of wisdom that this heretical pyschologist was much beloved by his like-minded friends and by humbler people with whom he was thrown into much contact by his forced humble livelihood. His suite of study and quartet rooms in the fire-proof Harvard House in the umbra of the fringe was a joyous gathering place for all liberal malcontents both within and without the university, where a motley range of lively and jovial discussions on education, philosophy, and science filled the interstices between Beethoven quartets and Brahms sextets.

To keep the university halo more effulgent there is a sprinkling of refined wealth. The son of the nestor geologist has inherited a brilliant geological mind and independence, has married a cousin who is also a geologist in her own right, has become a mining expert, been all over the world as a commercial geologist, and has naturally acquired some rich mining properties. With their artistic as well as scientific tastes they naturally build an elegant villa in the fringe of the university, keep up a most beautiful flower garden, and are extremely generous and hospitable. Many a poor and pinched instructor or assistant professor here gets his first and perhaps only initiation into a genuine aristocracy of mind and art. What meals and nectars are there served by the stately butler! How often the liveried limousine is at the kindly service of academic children or aged parents!

On the next corner about the presidential mansion is also the fine villa of the retired banker, who was a professor of physics in his younger years. He combines a business thrift with far more than the usual conscience towards the contributors of his wealth. As he is happily beyond pressing necessities or occupation, he has become a civic model in all altruistic public work and a wholesome, refining democratic

spirit amid the crude and too often petty academic indifference and intolerance.

Unique, too, is the scholarly literary bachelor in his elegant flat, all alone with his great library, his piano and pictures. Before his mother died, from whom he inherited an ample fortune, he taught English literature in the university and brought from Princeton his splendid private library, which he set up in his official college "office." But the janitor and college authorities objected to the books because they filled up the room and caught all the dust. So he moved them to his enlarged flat, when his fortune fell in, and resigned his assistant professorship. So he led a kind of Walter Pater life of study and writing, frequented the Town and Country Club as a golf and tennis enthusiast, was on the list of patrons for every good art and social cause, was the friend and entertainer, like Norton and Gilder, of many celebrities, and, like Fitzgerald, was democratic with his idealized "Posh." While many students laughed at this bachelor gentleman and invented sensational gossip to explain his solitary and aesthetic life, nevertheless he was a potent idealizing influence around the university.

When one gets some such perspective of the fringe about a university it makes more than a picturesque and entertaining scene. Even the embalmed Carnegienses teach a lesson of patience and tolerance with the slow-geared progress of the educational leviathan; while, in spite of the incompatible and uncomfortable academic ejects, this border forms on the whole an advance guard of education. How seldom do we hear of a university dismissal for ignorance or being behind the times. Rebels do not work well together with conservatives. The university, as a close corporation, must have enough harmony and co-operation to work effectively. Some toleration and patience with the advanced spirits is necessary for a university's healthy growth. But if the radicals in thought or teaching methods isolate themselves too far from the conservatively accepted ideas of social, political, and religious life and from the academic machinery of faculty and committee meetings, fraternities and student organizations, convocations and commencements, then the university is quite justified in ejecting such incompatibles. Naturally almost every such eject, however, thinks himself in the category of the progressives who should be tolerated within the university corporation for the leavening of the slowly rising mass of educational nourishment. He consequently nourishes an unpleasant grievance, poses as a martyr to bigotry, makes himself most disagreeable, and nurses all kinds of petty plots

for revenge. If he can outlive this malcontent stage, get settled in other vocational ways, and have the means, strength and leisure for continuing his progressive intellectual and aesthetic life, he can be more than ever a leader in sweetness and light.

When an amicable tolerance and understanding can exist between a university and its fringe, there can be a mutual advantage on both sides. The younger and progressive spirits in the faculty can congregate free from all restraint in the fringe, find a vent for their pent-up emotions and radicalism, recite free-verse, smoke and swear, sing or play quartets, compare notes on the rampant educational as well as political forms of extremism. How refreshing to thus hear the volcanic Welsh professor of German, just back from a campaign of loyalty-speaking among western farmers, anathematize with good round English oaths the loyalty lethargy,—to put it mildly and charitably,—of the Scandinavian as well as German Lutheran clergy. Even a dean can smilingly serve to his younger jovial colleagues an art league's generous May Bowl, with California ingredients in place of the original Rhine wine, in the freedom of the fringe's bachelor quarters. And then with what refreshing abandon they will fill a desk or listen during the heavenly Schubert quintet, an ecstatic Schumann quartet, a noble Brahms trio, or a mighty Beethoven quartet. From such relaxation and imaginative flights they can return across the street to their strict academic duties with renewed joy of life and zest. Even the more proper professors have some curiosity, temptation, and respect for these Bohemian art recreations and secretly wish they could do something a bit improper.

For the student life, too, the fringe offers some of the best ideals of cultural living. Just as most professional musicians and writers have no time, energy, or inclination to play music or read poetry for themselves or with their friends, so the professors of literature and music do not read books and make music at home for the pure love of it, where such good things essentially belong. Many students thus get the pernicious idea that books and music exist to be dissected in the class room or for professional public exhibition. Were it not for the fringe homes or bachelor quarters where some of them see Ibsen being devoured in the original and compared with the strength or weaknesses of the German and English translations, find Henry Adams Education and Mont St. Michael and Chartres to be household food for months, look their eyes out at some 2,000 wonderful pictures of L'Italia Monumentale, discover Morley's Recollections on the family reading table as soon as

it appears, wonder at the leisure and revival of all the old enthusiasm in again living through all of Emerson and Browning, are astonished to find some 30 books of the charmingly frank, poetic and philosophical school and college master Arthur Benson, are puzzled by academic amateurs sitting down weekly for a whole year to leisurely play through all of Beethoven's immortal 17 quartets, make this first acquaintance with the great song cycles in Schubert's Schöne Müllerin and Winterreise, Schumann's Dichterliebe and Brahms' Magalone as they are sung by college men inspired by the poetry and glorified by the music, but far above all shallow accomplishment and vain display,—were it not for some such spontaneous object lessons of the aims and purposes of cultural education most students would not take away from their university life much better ways of living than they brought as freshmen from their homes. For most professorial homes are also pitifully repressed, barren, characterless and monotonous. If the aim of a cultural college education should be to help to better and richer ways of living, there should be more opportunity to see real people living with joy in the finest accumulations of science and art. Such pedagogical classifications and vague generalizations as the traditional, vocational, and psychological points of view in education do not teach or encourage students to walk instead of motor, to prefer poetry to vaudeville, to love Schubert better than jazz music, to play or hear chamber music rather than fox trot, to read a book for fun instead of marks, to see or read some Shakespeare, Goethe, Schiller, Ibsen, and even Shaw and Barrie rather than get the insatiable melodramatic movie-habit, to make friends on Sunday mornings with the great moral philosophers from Plato and Marcus Aurelius through Spinoza to Emerson, George Eliot, Sidgwick and Royce rather than go to church, to dress comfortably and unobtrusively instead of expensively and flashily, to seek the wonders of knowledge rather than be driven through a text book or a laboratory ritual, to subserviate exercise to the making of strong hearts and minds through a healthy body instead of a vicarious football gorge of excitement and extravagance, to play tennis rather than sit and shout in the baseball bleachers, to vote according to social ideals instead of the Republican and Tammany traditions of special profit, to find vastly more happiness in working than in loafing, to choose work with some worthy aim and result rather than do kindergarten busy work, to cultivate our better instincts of sympathy and helpfulness instead of allowing the beating instinct of competition to make us hard and brutal, to let no necessary vocational or business

training blind us to the fearful wastes of advertising and the methods of competition and to the debasing methods of corporation monopoly,—in short to live out Herbert Spencer's motto, "Work to live: not live to work."

With no official status or responsibilities to uphold, but simply to live out the best that it has found in an earnest educational pilgrimage, the fringe has sifted out the best things from the university and thrown away the dust heap. So this college fringe, with its freedom, joy, and congeniality, is a delightful place in which to live. Perhaps,—who knows? —it may some day be officially taken back into the college fold, as a super-graduate school, with the highest possible degree of K. C. L., i. e., Knight of the Contented Life.

CONCERNING ALL DAY CONVERSATIONS

By Margaret Morse Nice

It requires courage to attempt to record everything a child will say in one day, and it certainly takes determination, persistence and hard work to carry it through. I do not wonder that there are so few published instances. M. C. and H. Gale ('00) were the pioneers in this line; they recorded no less than eleven all day conversations of children from twenty to thirty months old. In all of these they worked out the number of different words and ten of them they analyzed with great care. Bell ('03) has the distinction of reporting the largest number of words spoken by children in one day, but unfortunately he gives no other data. I (1917) tried to take the all day conversations of my three and five year old daughters, but did not succeed in recording everything, so my results were confined to the number of sentences said, the average number of words in a sentence and the approximate total number of words. G. C. and Julia Brandenburg ('15 and '19) have done the most thorough and admirable work not only in taking conversations but in working them up. They had the unexampled zeal to take two whole day conversations of their child when three and one when four, analyzing the data in two of these in great detail.

Fired by the Brandenburgs' achievement, we thought we ought to be able to get a complete day's account of our four year old, especially as we were sure she was much less talkative than their child. The birthday of our third daughter, R, came August 9th; I wished to take her all day conversation about a month before as a basis for collecting her four year vocabulary. On July 1st I tested myself by writing down every word she said for half an hour, and when I had achieved that, I saw that an all day's record was possible. We chose July 3rd, as on that day both her father and myself could devote ourselves to the task in hand, her father spelling me in the writing when I had some other unavoidable occupation. The little girl was entirely unconscious of the attention she was receiving.

R had been late in learning to talk (Nice, '18). She had an exceedingly small vocabulary at three and it was not until she was forty months old that she seemed really to make up her mind to talk. She learned with great rapidity from then on, so that by the age of four she had a fair sized

vocabulary—1,135 words; this is smaller than any that have been published for this age except Mateer's brother ('08) who had 1,020 words; he also was late in beginning to talk. R's sentences were short at this time and many small words were omitted.

Hourly Record.

The number of words and sentences used each hour are shown in the following table.

TABLE I

HOURLY RECORD OF THE ALL DAY CONVERSATION

Hours	7	8	9	10	11	12	1	2	3	4	5	6	7	Tot'l
Words	902	832	1061	1333	464	925	1052	870	531	444	769	611	715	10511
Average Words per Minute	15	13.9	17.7	22.2	7.7	15.4	17.5	14.5	8.8	7.4	12.8	10.2	11.9	13.4
Sentences	224	227	287	344	121	227	234	215	119	123	219	169	177	2686
Average Words in a sentence	4	3.7	3.7	4	3.8	4	4.5	4	4.3	3.6	3.5	3.6	4	3.9
Questions	34	17	13	33	16	21	17	11	7	34	35	29	31	300

R talked more in the morning than in the afternoon, for in the six morning hours she used 5,519 words and only 4,992 in the seven afternoon hours. The hour that she talked the most was from 10 to 11 when she used 1,333 words while playing with a three year old boy; the other most talkative hours were from 9 to 10—1,061 words—when playing outside with several children; from 1 to 2—1,052 words—when telling a story and working with Montessori colors; 12 to 1—925 words—the dinner hour; and 7 to 8 A. M.—902 words—when she first got up in the morning. The least talkative hour was from 4 to 5—444 words—when she was on a walk. The other two hours in which she spoke comparatively little were from 11 to 12—464 words—and 3 to 4—531 words;—during a part of each of these periods her father was reading to her.

By dividing the number of words each hour by 60 we find the average number of words spoken per minute. Of course she did not talk three times as fast one hour as another; it is rather the relative amount of silence that is indicated. The average for the whole day is 13.4 words a minute; the different hours vary from 7.4 to 22.2.

She used 2,686 sentences, the average number of words in a sentence being 3.9. The shortness of her sentences indicates her retardation, placing her status in skill of speech below the average three year old child. 193 of these sentences—7.2 per cent—were repeated; 20 per cent of Brandenburg's daughter's sentences at three were repetitions.

She asked 300 questions, an average of 23 an hour. Questions comprise 11.2 per cent of her sentences; those of Brandenburg's child were 23 per cent at three, and 20 per cent at four. More than half of these occurred in the afternoon; this differs with Brandenburg's results with the three year conversation but agrees with the four year.

Comparison with Other Children.

In the following table I have summarized the published all day conversations of children two and a half and over; I have also included that of one two year old boy as its large size makes it valuable for comparison with the others.

TABLE II

COMPARISON OF TEN ALL DAY CONVERSATIONS

Author	Child	Age	Total Words	Words Per Minute	Different Words	Per Cent of Vocabulary	Aver. Use of Each Word	No. of Sentences	Aver. Words in Sentence
Gale	Boy, C	2	10507	15.2	805	.....	13	.....	.....
Gale	Boy, S	2½	9290	13.4	751	52.5	12.4	.....	.....
Gale	Girl	2½	8992	13	629	41.6	14.3	.....	.....
Nice	Girl, D	3	7600	10.6	.....	.....	.....	2018	3.77
Brandenburg	Girl, G	3	11628	16	859	34	13.7	1873	6.6
Bell	Girl, A	3½	15230	21	.....	.....	.....	.....	.....
Nice	Girl, R	4	10511	13.4	731	54.5	14.4	2686	3.9
Brandenburg	Girl, G	4	14930	20	999	24	14.9	1967	7.5
Bell	Girl, B	4½	14992	20	.....	.....	.....	.....	.....
Nice	Girl, E	5	10500	13.4	.....	.....	.....	1702	6.17

Just as most of the vocabulary studies have been made on girls, so in these all day conversations boys are sadly in the minority. Parents of boys must come to the rescue and give us data on their sons.

In total words, Bell's two girls lead, the three and a half year child having the most—15,230. His four and a half year daughter and Brandenburg's daughter at four have nearly as many—14,992 and 14,930 respectively. Brandenburg's daughter at three used 3,000 fewer words than a year later, saying 11,620. Close to this are three records in the 10,000 group, my children—R at four years and E at five—and Carl Andrist at two. Then came Gale's son at two and a half with 9,290 words, his daughter at the same age with 8,992 and my daughter D at three with 7,600.

The number of words per minute varies from 10.6 to 20. In the case of different children there are doubtless two factors involved in these variations; first, some children speak faster than others and second, some chatter almost incessantly, while others are silent a part of the time.

The number of different words is known in six cases; it

varies from 629 of Gale's daughter to 999 of Brandenburg's daughter at four.

The percentage of the total vocabulary used in any one day is an index to the child's maturity; the younger the child, the larger, as a rule, will the percentage be. Gale has published the most complete series of all day conversations of any child. His daughter used 96.3 per cent of her total vocabulary at 20 months, 60.7 per cent at 21 months and 43.1 per cent at 22 months. The next two times are an exception to the rule for she used 48.6 per cent of her vocabulary at 23 months and 53.4 per cent at 26 months. However at 30 months the proportion is the lowest of all—41.6 per cent. Brandenburg's daughter shows the typical development, for she used 34 per cent of her vocabulary at three and 24 per cent at four. R's high percentage—54.5—is another indication of her lack of development in speech matters. This is almost the same as Gale's boy of two and a half; indeed R's figures are more similar to his than to those of any of the other children; their total words, different words and percentage of whole vocabularies are nearly the same, while the rate of words per minute is just the same.

The average number of times each word was used shows more uniformity than any other item; it varies from 12.4 to 14.9 in the six cases in which it can be calculated.

As to the length of sentences, the five children for whom we know it, divide themselves into two groups. D at three and R at four used short sentences—3.77 and 3.9 words respectively; while Brandenburg's child at three and four and E at five used sentences of 6.6, 7.5 and 6.17 words respectively. D ('18) was slow in beginning to talk and had not advanced at this time as far as the average three year old.

The Parts of Speech.

The distribution of the different words of her all day conversation is shown in Table III and also the percentages of the parts of speech in her whole vocabulary.

Forty-eight of these nouns were proper nouns and 10 were nonsense or words repeated after some one else; 33 of the verbs and 3 of the adjectives were inflections, while 7 of the interjections were nonsense, so that only 619 of these words were counted in making up her four year vocabulary.

The parts of speech of the different words follow in general the proportions of the parts of speech in the whole vocabulary of the child. Nouns were less used, while verbs, adverbs, pronouns and prepositions have higher percentages in the one day vocabulary than in the whole vocabulary. These percentages are much the same as those of Brandenburg's

TABLE III

PARTS OF SPEECH OF THE DIFFERENT WORDS

	Number	Per Cent	Per Cent in Whole Vocabulary
Nouns	302	41.4	52.2
Verbs	192	27.6	23.2
Adjectives	90	12.4	11.2
Adverbs	69	9.5	7.6
Pronouns	32	4.3	2.9
Prepositions	18	2.5	1.6
Interjections	14	1.9	0.4
Conjunctions	3	0.4	0.9
	731	100.0	100.0

child at four. Gale's son and daughter at two and a half used similar percentages as R, except that their nouns were higher, being 47.8 and 48 per cent; and their adverbs were lower—5.5 and 6 per cent.

The proportion of the parts of speech of the total words of her day's speech are decidedly different as shown in Table IV.

TABLE IV

PARTS OF SPEECH OF THE TOTAL WORDS

	Number	Per Cent
Verbs	2966	28.2
Pronouns	2328	22.1
Nouns	2040	19.5
Adverbs	1676	16.0
Adjectives	772	8.6
Prepositions	585	5.6
Interjections	97	0.9
Conjunctions	47	0.4
	10511	100.0

It will be seen that she used more verbs than any other parts of speech, more than a fourth of all her words denoting action. Over a fifth were pronouns and less than a fifth nouns. The next largest division was adverbs, comprising about a sixth of her total conversation and after them adjectives which she used only half as often. It is interesting and rather unexpected to find that half of the 10,000 words this child used in one day were verbs and pronouns. We should have data on older children and adults for purposes of comparison.

Each word was used on an average 14.4 times. There is

great variation, however in the number of times the words of each part of speech occurred as shown in Table V.

TABLE V

AVERAGE NUMBER OF TIMES EACH WORD WAS USED

Pronouns	72.7	Verbs	15.5
Prepositions	32.5	Adjectives	9.0
Adverbs	24.5	Interjections	7.0
Conjunctions	16.0	Nouns	6.8

In this category pronouns lead, since each was used on an average the surprising number of 72.7 times. Prepositions and adverbs were also used very frequently, 32.5 and 24.5 times respectively. Conjunctions and verbs come in a middle class being employed about the same number of times as the average for the whole vocabulary. Adjectives, interjections and nouns were used the least often, the average use of each noun being less than a tenth of the average use of each pronoun. Of course this means that with pronouns, prepositions and adverbs, relatively few words were used many, many times, while with adjectives and nouns a wide variety of words were used a few times each.

Much the same thing is evident in the proportions that her one day vocabulary bears to her whole vocabulary as shown in Table VI.

TABLE VI

PROPORTION OF ONE DAY WORDS TO WHOLE VOCABULARY

Parts of Speech	Per Cent Used in One Day	Parts of Speech	Per Cent Used in One Day
Prepositions	100.0	Interjections	70.0
Pronouns	96.9	Adjectives	69.5
Adverbs	79.3	Verbs	60.3
Conjunctions	75.0	Nouns	41.2

She used her whole stock of prepositions during this one day, 97 per cent of her pronouns, four-fifths of her adverbs, three-fourths of her adjectives, three-fifths of her verbs and two-fifths of her nouns. Again we are impressed with the lack of variety in the prepositions, pronouns, adverbs and conjunctions used by this child and at the same time the wide range of variety in her nouns.

The Most Used Words.

The accompanying list gives the words that R used more than 100 times during the day.

TABLE VII

THE WORDS USED OVER 100 TIMES

I	979	Baby	170	Do	121
Don't	247	No	161	Not	119
To	230	Get	154	This (adjective)	117
Mamma	215	Yes	150	Me	116
Want	210	See	139	Going	112
This (pronoun)	186	Here	126	On	103
You	175	It	124		
Did	175	My	123		

This list includes 6 pronouns, 7 verbs, 4 adverbs, 2 prepositions, 2 nouns and one adjective. No conjunction nor interjection were used more than 20 times. In a similar list of an average four year old child probably, "the," "a," "is" and "am" would be represented.

The child's egocentricity is well exhibited in her use of "I" nearly one thousand times—once in every 10 words, while more than one-third of her sentences (36 per cent) had "I" for their subject. She used the various forms of the first personal pronoun 1,243 times, making their ratio to other words one to every 8.5. The second personal pronoun gives us a different picture; there are only 210 uses, which means one in every 50 words. In the case of Brandenburg's daughter the ratio of first personal pronouns at 40 months was one to every 13.5 words and at 52 months one to every 15.6. The second personal pronoun was used once for every 31.6 words at 40 months and once for every 29.8 words at 50 months. Here again we very much need further data especially on older subjects.

The One Hour Conversation.

The results with the all day conversations of my other children were not complete enough to enable me to analyze them as I have done with R. Yet it seemed worth while to compare an hour's conversation of the three children. Choosing as a standard R's first hour in which she said 902 words, I took enough sentences from D's and E's all day conversations to get this same number of words; with R and E the time was one hour, while with D it was somewhat more as she said fewer words in an hour than her sisters. The conversation of each child embraced similar activities, dressing, breakfast and play.

In comparing the percentages of the parts of speech of R's one hour and all day conversations, we find a striking agreement in the proportions of the total words, the difference varying from 0.1 of one per cent to 2 per cent. There is

much less agreement in the proportions of the parts of speech in the different words; indeed there is a similar relation between the one hour and one day vocabulary, as there is between the one day and one month vocabulary. That is, the proportion of nouns is too low, while that of verbs, adverbs, pronouns and prepositions is too high. Thus it seems that with the total words, one hour gives a good prophecy of the all day conversation, while with the proportions of the different words its value is much less definite.

TABLE VIII

PARTS OF SPEECH OF DIFFERENT WORDS OF ONE HOUR'S CONVERSATION

	Numbers			Per Cent		
	E	R	D	E	R	D
Verbs	107	59	66	34.1	30.7	34.0
Nouns	77	59	55	24.1	30.7	27.8
Adverbs	34	26	25	10.6	13.4	12.7
Adjectives	52	23	23	16.2	11.8	11.8
Pronouns	25	17	17	7.8	8.8	8.8
Prepositions	13	6	7	4.1	3.1	3.4
Conjunctions	7	1	1	2.2	0.5	0.5
Interjections	3	2	2	0.9	1.0	1.0
	318	193	196	100.0	100.0	100.0

TABLE IX

PARTS OF SPEECH OF TOTAL WORDS OF ONE HOUR'S CONVERSATION

	Numbers			Per Cent		
	E	R	D	E	R	D
Verbs	251	266	208	28.1	29.6	23.1
Pronouns	206	208	201	22.8	23.1	22.3
Nouns	143	176	156	15.8	19.4	17.3
Adverbs	93	126	167	10.2	14.0	18.6
Adjectives	124	68	84	13.7	7.6	9.3
Prepositions	57	41	64	6.2	4.5	7.1
Conjunctions	19	3	6	2.0	0.3	0.7
Interjections	12	14	14	1.2	1.6	1.6
	905	902	900	100.0	100.0	100.0

In examining these tables it must be remembered that E was five and had a vocabulary of 2,502 words, that R was four with a vocabulary of 1,135 words and D was three with a vocabulary of 856 words. D and R are most astonishingly alike both in the number of the different words and in the proportion of the parts of speech With the same number

of total words their different words are 193 and 196. E being an older child and much more advanced in the technique of talking had a far greater choice of words—318,—which is 165 per cent of R's number. E used each word on an average 2.8 times while her sisters used each 4.7 times. D and R are also very similar in the proportions of the parts of speech; indeed, in half of them they are absolutely alike—pronouns, adjectives, conjunctions and interjections—while adverbs and prepositions differ only by one.

E's greater maturity is perhaps shown most strikingly in the matter of conjunctions—always a late acquisition; she has seven while her sisters have only one each. She has twice as many adjectives and prepositions as they. Adjectives are a specialty with E; she has a larger proportion of them in her vocabularies than most children. Proportionately E has fewer nouns and adverbs than her sisters, almost as many pronouns, about the same verbs, more prepositions and conjunctions and many more adjectives.

When we come to the table of the total words, we find less similarity than with the different words. Yet all agree in giving verbs first place and pronouns second. With E and R nouns are third in order, but with D they are fourth, being outstripped by adverbs which happen to be D's specialty. Adverbs come fourth with R but fifth with E where their place is usurped by adjectives. With R and D adjectives are fifth in order, being used only half as often as adverbs. All children are alike in giving sixth place to prepositions. Pronouns are the most uniform with the three, varying from 22.1 to 23.1; while adverbs show the greatest divergence, from E with 10.2 to R with 14 and finally D with 18.6.

In comparing the sixteen words used most often in R's whole day conversation and in one hour we find that fourteen are the same. The two of the hour's talk that do not correspond "going" and "me" are however among the twenty-one most used words of the all day's conversation. Therefore in her case one hour gave a fairly good index of the whole day. The words most often used by the three children during one hour are shown in the following table, and also the average number of uses of the eight words that were common to all.

Eight of these words were used by all three children: I, Mamma, to, it, my, want, you and don't. Two words in each list were used by one other child and six were individual. The words used by two children and the average number of times used are: "a," 20; "here," 16.5; and "me," 13.5. Several of E's words show her advanced status in comparison to her sisters; "the," her second commonest word, "is," her

TABLE X

THE WORDS MOST OFTEN USED IN ONE HOUR

By E		By R		By D		Those Used in Common	
I	56	I	90	I	69	I	72
The	30	Mamma	35	My	36	Mamma	24
To	23	This (pronoun)	24	Want	31	To	23
It	23	Baby	19	It	31	It	22
Mother	21	To	17	Father	31	My	19
You	20	Don't	16	Yes	30	Want	18
Is	19	You	16	To	29	You	17
Me	15	Here	16	A	29	Don't	13
What	14	Want	13	Up	22		
My	11	Going	13	There	18		
Don't	11	Me	12	That(pronoun)	18		
She	11	See	12	Here	17		
Am	11	Did	12	Mother	16		
A	11	It	11	You	15		
And	11	My	9	No	14		
Want	10	Get	9	Don't	13		

seventh word, "am" and "a.' Neither of the younger children used "the' at all and R seldom used "a." They usually omitted "am" and "is." E used "what" as a relative pronoun instead of "who," "which" and "that;" D did the same only less often for her sentences were less complicated, while R rarely used any relative.

The parts of speech of the eight words most commonly used by all were 1 noun, 2 verbs, 4 pronouns and 1 preposition. E's words were divided thus: 1 noun, 4 verbs, 7 pronouns, 2 adjectives, 1 preposition and 1 conjunction. R had 2 nouns, 6 verbs, 6 pronouns, 1 adverb and 1 preposition; while D had 2 nouns, 2 verbs, 5 pronouns, 1 adjective, 5 adverbs and 1 preposition. Perhaps the most striking difference in these lists is E's entire lack of adverbs, whereas D had five. R had no adjectives and D only two verbs.

E used "I" 56 times or once in every 16.2 words, while R used it 90 times, once in every 10 words. D used it 69 times, but omitted it 18 times when it should have been used, as: "Ha' (have) my ap'on on." The addition of these makes 87 uses or once in every 10.5 words. D used "you" once in every 60 words, R once in 56 and E once in 45, which is just the development we would expect.

Such an array of facts and figures needs a little enlivenment, so I will conclude with a few samples of what the children really said.

D. Three years old. Playing with toys.

Donkey goin' in autobile. Dat two toad. Goin' get dinner. Goin' come in hout (house). Big toad come to dupper (sup-

per). 'Ner big toad a'k him to dupper. He did go adeep (asleep). Yet (yes). Goin' in autobile.

I don't like 'ou to do dat. Dou naughty ding.

Dat where bire (fire) id (is). Cookin' and cookin' again. I'm g'ad at him. Look at I did. Dee (see) derè. Dat b'oken. Dee dere. Cow gettin' out. No. An' hen goin' come out. Goin' on a walk. He goin' on a autobile bip (trip). Oh no. Look at dat. Dat a little bed. Bow-wow goin' to deep.

R. Four years old. In bed and being urged to go to sleep. (Sweet Cherry was an imaginary friend of wonderful prowess.)

Feet Cherry do 'tay up very late. Feet Cherry more bigger anybody in her land. She got pig name Pink and Blue. Yat baby pig she did get out. She did get out pen. She won't run away. She nice baby pig. I don't like any nap. Feet Cherry don't take any nap any more. Do you know fut (what) Feet Cherry do? Feet Cherry and me not 'faid lion. Feet Cherry got some lion. I not want any lion come here.

Feet Cherry do s'eep outdoors. In rain she do. She do in shnow. You know fut Feet Cherry do?

P'e get down yose dishes. Can't you get down yose dishes? I want yem *today*. After yis day tomorrow? You do say it today ev'y time. When tomorrow come?

I can't go right to s'eep. Baby do wake me up ev'y time. Can I wake up ev'ybody? Fy (why) do rabbit wake up ev'y rabbit? I want wake up somebody. I do. I don't. I hungry. I hungry. Yes.

You know fere my sword is? Can I get my sword? Don't. No.

E. Five years old. Visiting in her mother's bed in the morning,

Why, I tried to get him. We went under a bridge and over a brook and under a bank and when we came back I tried to catch the frog and a great big beetle with claws. I didn't like the beetle. No, I only caught the toad. He hopped back and forth from one hand to the other. He was a young toad,

I don't like to pick up grasshoppers. They're too wibbely-wobbely. They aren't pleasant to pick up.

I don't care for paper dolls. I like animals better.

"Your noble children," why did Tabaqui say that? When they were just born, they weren't brave, were they? I don't think any wolf was that way.

(To her baby sister.) Oh, you're making all little cunning faces. What is it, little sweetheart? She's bearing her weight

against me. Little mischief feet! I call them little mischief feet.

You little funny-fun! You little kiss-heart!

Oh, you little bright eyes! Why do you stop and laugh at me? Mother, was she laughing at me? I like to have a baby laugh at me.

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SCHOOL ADJUSTMENT AND THE PSYCHIC ENVIRONMENT

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The present paper is an outgrowth of a study of the factors which help or hinder the child's adjustment to the school. The numerous "disciplinary cases" with which teachers and superintendents have to deal, "school mortality" and retardation bear witness to the fact that a large proportion of the school population never makes this adjustment. Significant as these symptoms are, they do not represent school dissatisfaction to its fullest extent. Experience with the so-called normal child, the child who succeeds in adapting himself to circumstances, reveals the presence of considerable minor irritation, and dissatisfaction due to disharmony between the child's needs and his school relations, which is not recognized under a system which is desirous of maintaining averages rather than developing potentialities to their fullest extent. If, however, the aim is to develop and utilize all the ability latent in the normal and subnormal children, those factors which hinder complete self-realization and use of individual capacities, whether manifest or latent, must be discovered and removed.

More accurate estimates of individual ability, better grading and classification, genetic adaptation of the school work in method and content, designed though they be, to facilitate adjustment, do not go to the root of the matter, for though they may make adjustment possible they do not necessarily bring it about. The chief element in the process of adaptation is the child. History is replete with examples of men who learned under the most adverse circumstances. However crippled the method, or distorted the theory of development determining the educational procedure of the time, there were always some who made shift to profit by it. These were people with a natural attitude for scholastic pursuits or people animated by a purpose whose consummation required the knowledge and abilities imparted by the schools, or were thought to. In either case there is no conflict. The outer and inner demands are at one; effort and energy are focused on a single objective; there is a minimum of that emotional stress produced by a conflict of interests with a maximum of satisfaction. Under these conditions the individual may

be said to be perfectly integrated, and because his school tasks, being based on fundamental needs, tap the source of energy, the instincts and emotions, he may be said to be truly activated.

Significant in helping or hindering integration is the influence of the home and the attitude of the parents. Jung has shown that the complexes of the daughter are similar to those of the mother; that the former takes the same attitude to certain emotionally toned experiences as were taken by the mother under similar conditions. Williams has called attention to the significance of the parental interests and occupations in directing and shaping the child's interests, giving point to the fact that a large part of the incentive to study comes from the approbation which the mother or father gives to the successful school child, in addition to the fact that children whose parents are intelligent and interested in current thought, or are workers with ideas rather than with objects, have less difficulty in adjusting themselves to their school work, express themselves better and make better use of their gifts than children less fortunately environed. Superiority may indeed be due to hereditary influences, but it undoubtedly manifests itself more easily and more completely because of these environmental advantages.

These influences not only aid the revealing of innate qualities but they also give direction to the child's energies. The new psychology has demonstrated the fact that choice of profession is based on a deep, personal need, and is a significant expression of the personality. The same need may, however, be satisfied in various ways as may be culled from psychoanalytic literature. The child with sadistic tendencies may very naturally gravitate towards the trade of butcher; the same needs will be satisfied, however, if he becomes a surgeon. Obviously, the child of intelligent parents is likely to become a surgeon, while the child of a manual laborer, unless he have unusual persistence, and standards, is likely to become the butcher.

This is, however, only a theory based on another theory. Emphasis should be placed on the fact that the child follows in the footsteps of his parents, perhaps not in detail, but in general, through imitation and the force of environment. Their approval of activities which most nearly approach their own, stimulates the child to further efforts in the same direction. The reverse side of the shield is that with which the teacher has to deal, for we are as yet more interested in the cure than in the prevention, in the defective rather than in the superior. The group of cases presented below are cases actually found in the school-room, having been brought to

notice as problem cases. These children are problems, because in a positive view of education the child who is not realizing himself completely is the child whose education is a failure. These are normal children who are working at submaximum efficiency because in each case some psychic factor in the environment militated against integration of the child's personality.

Case 1 was recommended for investigation because of poor conduct. He does not respect his teachers, is indifferent alike to encouragement and reprimand, is perpetually tardy, and refuses to take any responsibility for his misdeeds.

The boy is normal in height and weight. He is alert and active. Attendance at school is regular, denoting the absence of colds and other ailments which cause sporadic absence among school children.

Psychological tests show that the boy is normal mentally, but not above age. There are no lacunae and no marked abilities. Extra-scholastic pursuits betray more than average development. He is ten years old, but reads and understands the daily papers, and is conversant with current events, as discussed in various periodicals. His parents have been in the habit of reading to him from these publications and from standard novels suitable for adolescents.

The parents of this boy are interested in civic affairs; the mother is a prominent club woman in the fair-sized city in which she lives, and the father has held political office of a legal nature. They are interested in the school which the child attends, for personal reasons, and because it is unique in its policies and aims.

Thus far the influences surrounding the child seem entirely favorable. Closer investigation, however, reveals the fact that the attitude to the school is intensely critical, and that the child has listened to discussions of the school distinctly derogatory to it, and to analyses of the teaching staff in which the personality and education of its members were held up to ridicule. The child's very mediocre school performance has been assigned to the inadequacy of the school and personnel in meeting his needs.

This attitude has reacted on the child in a very natural way. He does not have the usual childish faith in his teacher; he realizes that it is quite safe to criticize her, and to lay the blame for his difficulties on her. He, like his mother, lays the responsibility for his progress on the teacher. He is, as it were, a disinterested observer of the whole situation.

Since it was not possible to change the mother's attitude, which is an integral part of her personality, all effort was

concentrated on altering the relation between the child and his teacher. Work within his ability but sufficiently difficult to command thought, was assigned in units small enough to be completed well within a given time. He was made to understand that its completion was a requirement and not a request; and was held strictly accountable for its completion. He was no longer complimented for the things which he did well naturally, but for the difficulties he attempted to surmount. The situation was thus changed from one in which his young teacher sued for his approval, to one in which he had to win hers and that of his classmates. Her new attitude commanded his respect, and made her approval worth winning.

Case 2. G. H. is a persistent problem in school. His school work is accomplished at half the normal rate. He is considered a hopeless case by the teachers, not because of deficient intelligence, but because of external factors which they cannot overcome.

Attendance is very irregular. The boy is normal in height and weight. He says he is never ill. He was dirty and ragged but has improved immensely since first seen.

Irregular attendance was found to be due to the boy's working at odd jobs, which when they lasted over the week end were not interrupted by attendance at school. The boy's parents are working people; the father works steadily at some kind of manual labor. There are three children, one of whom is a teacher. The family are poor, though not poverty-stricken. Why then does G. neglect school for work?

On investigation we find that G. is practically self-supporting and has even a little money on hand; in fact, he is on the same economic basis as his father. Nor is his wealth attained through drudgery. Conversation with the boy reveals how vivid and adventurous his life is. He is constantly with grown men, works with them, teases and is teased by them. He assists furniture drivers and accompanies them on over night trips on the motor trucks. When seen he had but lately returned from a trip up the river on a barge. He is planning to ship on a schooner bound for Hawaii during the vacation. His manner fits his own conception of a man of the world, though in his boyish liking for his teacher, and his avidity for approval, he is entirely a small boy.

How pale are the joys of school against such an existence; how feeble its rewards when compared to financial independence and plenty of ice cream! How useless the approbation of the teacher in the face of these, if his idol, his father, has no education, and his mother is too glad of the relief of providing for him, to discourage his working!

Can the school hold such a boy and should it try to? If the boy is likely to feel the need of education later in life, first-hand experience and actual life-contacts such as he is getting now will undoubtedly be invaluable to him, and he will learn the faster because the need of knowledge has been actually felt. There is grave danger, however, that he may be one of those men described by Jack London, one of the untrained who live by their physical strength and endurance in blind alley occupations until strength and endurance give way to the early senescence of overtaxed capacities, and they are obliged to join the ranks of the unemployable.

The next two cases are interesting because they are the product of the same influences, and show very similar reactions.

Case 3. The older boy is reported as "doing absolutely nothing in school," is thirteen years old and normal as regards physical conditions and social reactions. His intelligence quotient is 107 on the Stanford Scale. Other tests involving comprehension, abstraction and practical judgment are well done. In mentality, he is well in the adolescent period.

Conversation with the boy evinced his discontent with the teacher, who, according to his account, was unfair and too strict. He did not like his work because he thought it would be of no use to him later. He gave the impression of a boy who is doing his very best against odds, and is seriously viewing his education as a preparation for life. Further inquiry brought out the fact that this boy had never put forth any effort, although various teachers had tried to stimulate him, and that he always had a good excuse for his own failures. Indeed, this facility in excusing himself convinced the investigator that his failure was not due to lack of ability but to absence of motivation.

Examination of the home conditions and parental attitude gave the following from the mother: "G. is the result of an experiment, and it has failed." "Finis" adequately describes her attitude. The child is disobedient at home, but he is never held accountable for his acts. Privileges and treats occur automatically and are never the reward of merit. School success would profit little by it if they were, as in the mother's opinion, "It doesn't make any difference what a boy does in school. If they are going to be successful as men, they will get along without schooling."

It is undoubtedly true that many a child of mediocre school attainments has achieved much in later life, if only for the fact that his energies and interests have been deflected from the school in the direction of his talents. This boy, however, says he wishes to be a mechanic, but has never finished any contrivance he is interested in, or gotten past a difficult point

with it. He is no easier to motivate in subjects demonstrably having a bearing on this than in any other. The conclusion, therefore, is evident. This boy lacks the power of applying himself to any difficult task, because he has never needed this power of application to gain anything desirable. The approval desired had come to him automatically, or through his ability to avoid blame. The idea that good work in any task attempted is inherently worth while, has never been fostered, nor has school success, as a means to an end, been given any value. This being the case, he has taken the path of least resistance with the result that he is a dismal failure in school.

Case 4. This boy's brother gives a picture of the inception of the deteriorating process which went on in him. S. is seven years of age, normal physically, though listless and slow in his movements. He is truly superior in intelligence, in spite of the slowness of his reactions.

The teachers report that he is difficult to motivate, and believe him to be sub-normal in intelligence, as he is overdue in all school subjects, especially reading.

The child was tested and told that he was a bright boy and should be at the head of his class. His teachers were advised to apportion his work for each period, emphasizing the fact that he would be expected to finish it in the time allotted, since they knew now (since the test) that he could do it. Improvement was noted at once, as was to be expected since the child was young, and therefore, highly suggestible. The extent to which he had been soldiering was revealed by the fact that his rate of reading rose from half a page a day to ten pages a day. Some changes in his home life were suggested, as he had been retiring at nine or ten, and was sharing the social life of his parents. Since he was no longer sleepy and tired in school, it was possible to hold him to the requirements. He has since been making rapid progress under the stimulus of his own success.

Case 5. Howard is a boy of 10 with an intelligence quotient of 143. He has no difficulty with any subject, but progresses slowly because he is unwilling to apply himself. He has been a problem for the past two years for while he is holding his own, he is not making the progress to be expected from an intelligence like his. He is a leader. His zeal and ingenuity in wrong doing are endless. As may be expected, he has no difficulty in distinguishing right from wrong. He always takes a leading part in class room discussions on ethical questions, and makes very fine rules regarding his own conduct, but doesn't live up to them.

This discrepancy between thought and action may be easily explained. Howard's parents died within a week of each other. leaving him a large fortune, of the existence of which he is acutely aware. His guardians are an old grandmother, who speaks no English, and the executor of the estate, who lives in another city four hundred miles away. The fact that he finds no difficulty in circumventing the grandmother, his sister, or any of the servants who surround him, explains how his misconduct is possible, but it does not explain why a boy who experiences no difficulty with work should be averse to doing it, especially as the individual system of instruction which holds in his school allows him to forge ahead as rapidly as he wishes.

Howard himself gives part of the answer: What's the use of getting in a higher class, I'm little and the fellows there wouldn't play with me. But this is not all. The device on Howard's shield is the dollar sign. He has never had the opportunity to learn that there are sources of enjoyment other than purchasable ones. The idea of rendering a service to the community through achievement has never occurred to him or been presented to him; he has never envisaged the satisfaction of self expression through an art or a science.

In spite of his mischievousness, Howard is looking for an objective. The "laissez faire" possible to wealth does not really appeal to him. He has obtained a freedom which is no real satisfaction to him. He does not, in the last analysis, enjoy pitting himself against the authorities. This mischievousness is merely the product of an agile and ingenious mind attempting to escape the confines set by unimaginative guardians and teachers. His behavior is not wicked; it is merely inconvenient, for much of it is an attempt to escape from a commonplace routine. When threatened with expulsion, Howard has no difficulty in conforming, showing that the absence of suitable motives and goals are largely responsible for his misbehavior. His fear of expulsion is however, only an inhibitor of action. To make this boy efficient, motives must be found which will stimulate his emotions and intelligence to acceptable ends. In the coming term, this boy will be drawn into some enterprise, probably some shop activity, with other boys, where he will have an opportunity to use his talents, and be obliged to co-operate with other boys on some project requiring information and skill. His academic work will be more carefully directed than hitherto, with a view to eliminating unnecessary repetition, and drill, as well as preventing idleness by apportioning the ground to be covered in a given time, with respect to the ease and rapidity with which he learns. In this way, it is hoped that Howard will not only cease to be a dis-

ciplinary problem, because of the ingeniousness with which he uses his spare time, but it is hoped that he will come to a realization of the possibilities in working for the sake of achieving.

Case 6. Raymond D. with an intelligence quotient of 135 has taken twice the usual length of time to cover a unit in spelling;—half again as long as the average for language, and two and a half times the normal period for arithmetic. His teacher reported (with what fidelity cannot be determined) that he could not be motivated.

Conduct was fair, and social reactions negative excepting the fact that he was generally an onlooker on the playground and didn't seem to know how to "get into the game." If nagged or scolded, the boy would sulk and hold resentment for an appreciable time, but was quite obedient otherwise.

The child was examined and told that he had done exceptionally well, that he could be the pacemaker for his class, and that he could progress by leaps and bounds. The child cleared off the back work within a week or two after hearing this, and since has been progressing at twice the speed of the average child. Two or three slumps have occurred, but only a little special interest and encouragement was needed to lift him out of these.

This case would have been dismissed as one due to the teacher's neglect and a lack of appreciation of his ability had not an unusually good opportunity made us acquainted with his environment.

The boy's father is dead. The mother has a little store which she manages with the help of Raymond's sister, who is several years older. The latter is an attractive girl, though not too gifted with intelligence, and a good helper in the store. Raymond is no more attractive than a growing boy of ten usually is. He is bookish, impractical, sensitive. His mother is a notorious nagger, who emphasizes Raymond's shortcomings, and is certain he will never amount to anything. There has been adequate ground, therefore, for the boy's developing a feeling of inferiority which seems to have paralyzed ambition. He has become sulky and resentful under unjust nagging, and of course does not distinguish between it and the efforts of the teacher to prod him into doing his work. Having brought about a more friendly attitude through judicious praise, the boy could be stimulated to greater efforts. At present the boy has a friendly attitude toward his teachers and is doing good work. He falls off occasionally when a new teacher who does not know the situation fails to provide the encouragement he needs. This boy's difficulties have been

removed merely by providing the friendly interest and recognition children usually enjoy from the parents.

Case 6. The effect of environment is clearly shown in E. M., 15 years old, and in the eighth grade. She is an attractive girl of average intelligence. She is studying piano, singing and dancing, frequently appearing in public as a dancer. She has been doing this since she was eight years old. Her absences are frequent.

E's school work is below the performance of the average child in the Eighth Grade although she is over age. Her difficulties are ascribed to carelessness and indifference.

This child's intelligence is such that success in school work demands application. This she has never given for a number of reasons: her egotism has been satisfied by social success outside of the school. Her school work has been given an insignificant place in her life by her famliy. They have emphasized her social success and have ignored her failures in school. The interest and excitement incident to these social activities are far more intense than any the school has to offer. The family have tacitly acknowledged that this girl was never destined to receive more than an elementary education and have never stressed the importance of her school work. Conversation with the mother makes patent the fact this child's successes are the surrogate for those the mother has desired but missed, the daughter being merely the vehicle for the gratification of the mother's vanity.

As a rule, girls adapt themselves to school work more readily than do boys. The school seems more nearly to meet their needs; they are more suggestible and are more readily activated by ordinary incentives like praise, approbation and competition. If the girl has clearly defined intellectual interests, interest in school work is not thereby excluded. If she is doing work below her capacity, she seems to take satisfaction in doing it perfectly even though futilely. The non-motivated girl is likely to be a girl of average or less than average ability, and in many schools the average girl is likely to be of a well defined type—the youthful version of a shallow woman.

This girl represents a group of cases alike in the direction of their interests, their non-success in school work and inability to apply themselves to it. They are alike, too, in possessing certain stereotyped modes of reaction. In the tests, for example, far more pleasure is taken in responding in a rather superior manner with "I haven't the slightest conception," to a question they do not know than in answering it correctly. They are problems in discipline at home as well as at school. They differ in intelligence, ranging from average

to superior,—the highest on the Stanford scale being 120. Everyone in this group of girls sings, plays on an instrument, or dances well enough to perform before a not too discriminating audience, but not one has an outstanding talent, nor have they the love of music, or the drama which generally accompanies a talent. It is very probable that their achievements, such as they are, are due to the absence of that restraint which generally hampers the ordinary individual when he performs publicly, and to incessant practice. On the whole, their success is cheaply bought, being obtained through the interest in and tolerance for extreme youth, and the pageantry of costume, setting and makeup.

When we realize that a child receives exactly the same mead of applause for hastily prepared, inartistic performance as does the individual who has worked and studied for recognition, we may well ask ourselves whether it is wise to accustom the child to cheaply bought victories, to jade the child's satisfaction in the work as an end in itself, or to build the child's life on a simple, perhaps evanescent talent.

It is not proposed to eliminate the arts mentioned above from the child's life. On the contrary they, especially dramatics,—are a part of the play tendencies, but it may perhaps be suggested that emphasis be placed on the activity as an end in itself rather than on the public performance, that when the latter does take place, it be with a certain finish, which need not be high, but certainly should represent persistent effort and the best of which the child is capable, and finally, stress should be laid on the performance as a means of giving pleasure rather than of displaying oneself.

The life of the child, like that of the adult, has increased in intensity and novelty, as education, despite many reforms in method and curriculum, has not increased. School appeals to the bookish, or to those to whom school work is easy, so that emotional and social needs are partially satisfied through the stimulus of ambition, competition and approval. To souls accustomed to the thrills of the moving pictures, the gratification of displaying a talent, and the ever-shifting panorama of events, the delights of the school are weak. The child who leads a quiet home life, with simple amusements, will come to the quiet interests of the school with unjaded palate, eager for the stimulus and knowledge which the school day brings. If he comes to the school with the belief that his work is eminently worth while, his success a matter of great concern to his parents, he will give himself to it with far more zeal than if he is doubtful of the value of his strivings and the things he is striving for.

TONSILS AND ADENOIDS: A STUDY SHOWING HOW THE REMOVAL OF ENLARGED OR DISEASED TONSILS AND ADENOIDS AFFECTS A CHILD'S WORK IN SCHOOL

By A. H. MacPhail

Part 1—In recent years much has been said and written about the physical defects from which children suffer, especially those defects that are remediable. Dr. L. Emmett Holt estimates that one-third of the school children in this country have remediable physical defects and this means from seven to eight million children.[1] Terman has estimated that ten per cent of our school children are suffering from the ill effects of tonsils and adenoids alone.[2]

The investigation presented here is concerned with the problem of tonsils and adenoids. It is not necessary to enumerate the many harmful effects that enlarged or diseased tonsils and adenoids have upon the child. The particular ill effect upon which this study focuses its attention is the quality of work done in school by children who are afflicted with abnormal tonsils and adenoids and it seeks to prove its point by comparing the quality of work that certain school children have done after having these tonsils and adenoids removed with the work that they were doing before the operation was performed. The physiological and psychological aspects of the problem are not touched upon but facts are presented to show that in the cases that have been investigated, it is true that children are capable of doing better school work after tonsils and adenoids, enlarged or diseased, have been removed.

The pupils whose school records, before and after having their tonsils and adenoids removed, were investigated were pupils in the Adams and Cranch Schools. The school nurse, Miss Marion Jackson, supplied the names of children who had been operated upon through her co-operation together with the date of the operation. Information was also obtained concerning others who had been operated upon independently of the school nurse.

In order to reach a fair estimate of the quality of work that

[1] See "Democracy for Children," by Dr. L. E. Holt, Goodhousekeeping, May, 1919.

[2] See "The Hygiene of the School Child," by L. M. Terman, Houghton-Mifflin.

these pupils had done before they were operated upon all those cases were discarded for which there was not available a school record of ten months before the date of the operation. Similarly all cases were discarded where no record was available for at least ten months after the operation. It was then found that both schools offered thirty-one cases that were considered worthy of investigation.

The first step was to look up the school record of each of these thirty-one cases for the ten school months immediately preceding the date of the operation. Following this, the school record of each case was looked up for each school month subsequent to the date of the operation up to the time when any given pupil left either of these schools for any reason, or up to the date of compiling this report in the case of pupils who were still attending school. As might be expected, it was possible to get a much longer school record after the operation for some pupils than for others.

In order to discover, if possible, just how soon after the operation the child began to do work of a higher grade than he had done before the operation, the history of each case was divided into periods of ten school months each. This term "period" will be often used in this discussion and will always mean a group of ten consecutive school months. It will be noticed that these periods are referred to as "the period before the operation," and the first, second, or third "period after the operation." Eighteen cases presented school records of at least twenty months after the operation, and a separate study was made of these. Similarly, eleven cases having a thirty month record after the operation offered an especially valuable study because of the opportunity to observe results over this longer period of time.

When the average that each of the thirty-one pupils attained in the first period after the operation was compared with his average for the period just before the operation, it was found that only about one-third (32.2%) of the cases showed an improvement and a little over a half of all the cases were doing a poorer quality of work! As is indicated a little later in this study, this poor showing in the first period after the operation is doubtless to be explained as an effect of the operation with consequent psychological impairment. By comparing an average of *all* work done subsequent to the operation with what was done before it became evident that improvement in school work is not often observed until after a year from the date of the operation.

When it had been conclusively shown that improvement was to be expected in the first period in only a few cases, it

was naturally looked for in some later period. It became necessary then to make a very careful study of those cases that had longer school records after the operation. The eighteen cases that had records for twenty months (i. e., two periods) were investigated. Sixteen out of the eighteen records show that better work was done in the second period after the operation than in the first period after the operation. In other words about nine-tenths are able to do better work during the second year after the operation than during the year immediately following their operation. This fact corroborates what has already been suggested, namely, that in about two cases out of three, it takes the pupil about a year before the benefits of the tonsil and adenoid operation have produced such an improvement in the physical being of the child as to enable him to do better mental work. The results just mentioned show that nine-tenths of the pupils studied begin to reap physical and consequently mental benefits from their operation sometime *during the second year* after their operation.

TABLE A

TABLE SHOWING WHEN IMPROVEMENT BEGINS

	Per cent of Cases Showing Improvement		
	Period 1	Period 2	Period 3
Based on 31 cases	32.2	....	....
Based on 18 cases	33.3	66.6	....
Based on 11 cases	36.3	63.5	100
Based on all groups	33.9	65.	100

Table A presents an epitome of the information that was sought. It answers the questions that prompted this study. Recall at this point that "improvement" implies increase over pre-operation averages. Basing its conclusions on all the group studies that have been made, we find that 33.9% of all the cases do better work during the first year after the operation; 65 % do better work by the end of the second year; 100% do better work by the end of the third year (this last conclusion based on eleven cases). These conclusions are not based upon theory or estimates, but are derived from actual cases as a perusal of the tables and diagrams presented in this study show. It is hoped that having their foundation in fact, they may be of some value.

Part 2—The conclusions drawn in Part I of this study may very well be questioned on the ground that the comparisons

made are kept entirely within the group. In other words, the study concerns itself only with children who have had their tonsils and adenoids removed. If a similar study were undertaken having as its subjects school children taken at random except with the exclusion of those children dealt with in Part 1, and similar results were found to be true in this second group, then the conclusions of Part 1 would be without significance. If a large number of children at random improve from year to year in the same manner that children who have had their tonsils and adenoids removed improve, then the actual removal of the diseased tonsils and adenoids drops out of the situation as a controlling factor. Hence, to test the validity of the conclusions stated in Part 1, this second investigation, which may be called a check experiment, was made.

To get data for this check experiment a total of one hundred children was selected from the Adams School and the Cranch School. Since it was necessary to secure their records for each of four consecutive school years, it is obvious that these children had to be taken from the fifth, sixth, seventh, and eighth grades. As in Part 1, in order to discover how many improved in the quality of their work and when, the rating of each case for the first year was considered as zero, in the sense that with it each of the second, third, and fourth years was compared. For example: Case 21 was doing the same kind of work in the second, third, and fourth years as was done in the first. Case 32 did better work in the second, third, and fourth years than was done in the first. Similar comparisons were made for each of the one hundred cases taken at random. The results of this investigation showed that in the second year 42% of these children at random did better work than in the previous year, namely, the first year. In the third year 41% were doing better work than they did in the first year, and in the fourth year 41%. Note that the per cent of cases that showed improvement is practically the *same* for each year, 42%, 41%, 41%.

At this point it will be necessary to adopt certain terminology that was used in the previous study. The term 'period' means a school year of ten months. Using the first year records of these one hundred children as the norm with which the three subsequent years are each to be compared, the second year will be referred to as the first period, the third year as the second period, and the fourth year as the third period. It is now possible to compare the manner in which pupils who have been operated upon for tonsils and adenoids have improved in their school work with the manner in which

children at random improve. Refer to Table B for this comparison.

TABLE B

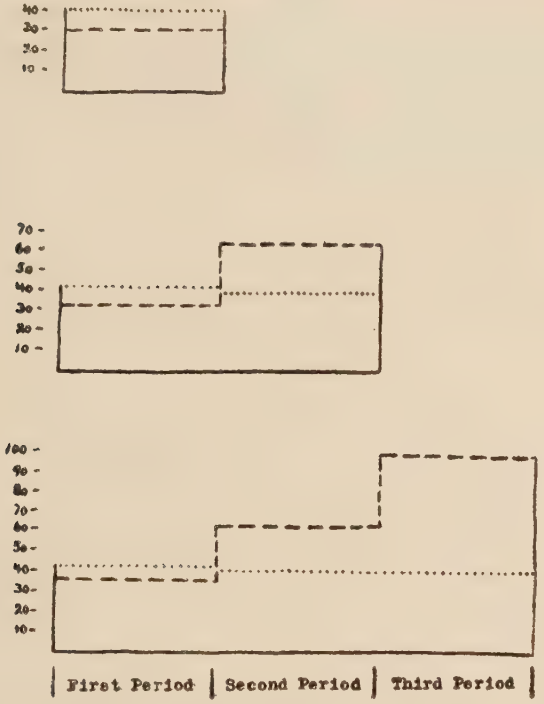
TABLES SHOWING HOW TIME OF IMPROVEMENT OF "OPERATED CASES" COMPARES WITH IMPROVEMENT AMONG CHILDREN AT RANDOM

		1st Period	2nd Period	3rd Period
A	Per cent of 31 cases (operated upon)	32.2	....	....
	Per cent of 100 children at random..	42.	....	....
B	Per cent of 18 cases for 30 months (operated upon)	33.3	66.6	....
	Per cent of 100 children at random..	42.	41.	....
C	Per cent of 11 cases for 40 months (operated upon)	36.3	63.5	100
	Per cent of 100 children at random..	42.	41.	41.

The conclusion reached in Part 1 that pupils who are suffering from the ill effects of diseased tonsils and adenoids are made capable of doing better school work by being operated upon seems to be quite justified by the results of this check experiment. Part A of Table B agrees with what was stated in the previous study, that immediately after the operation, there seems to be a dropping off in the quality of school work done, and it is here seen that 42% of pupils at random improve in this period where only 32% of the thirty-one operated cases show any improvement. The validity of the conclusion reached in regard to ability to improve rests then upon Parts B and C. Disregarding a very slight variation of 1%, it has been shown that the percentage of children at random who improve from year to year remains practically static, while among the pupils who have been operated upon for tonsils and adenoids there has been shown to be a pronounced increase from year to year in the percentage of pupils who improve in the quality of their work. Generally speaking one-third of the operated cases improve in the first period, two-thirds in the second period, and three-thirds in the third period. Over against this we have the fact that of the children at random two-fifths improve in each of these three periods. This same data is presented graphically in Table C where the *horizontal* dotted line representing the per cent of pupils at random who improve from period to period is in striking contrast to the mounting steps which indicate the increasing number from period to period who improve among the operated cases. Among school children at random the number who are doing better work than at some given pre-

vious time *remains practically the same* from year to year. Among children who have had their tonsils and adenoids removed the number who are doing better work than before

TABLE C



the operation *increases rapidly* from year to year, and when two years have passed *exceeds* the number of children at random who improve.

Summary

This study was undertaken to discover how the removal of enlarged or diseased tonsils and adenoids affects a pupil's work in school. The school records of thirty-one pupils were investigated, both before and after the date of the operation, and such comparisons were made as would show whether a pupil's work improved and when that improvement became evident.

The results of the study may be expressed as follows: of fifteen school children taken at random from among their associates, six may be expected to be doing better work one

year from now, six may be expected to be doing better work two years from now, and six three years from now! But of fifteen children who have just been relieved of diseased tonsils and adenoids, five may be expected to be doing better work one year from now, ten at the end of two years, and all (or very nearly all) when three years have passed. Here seems good reason to believe that the removal of diseased tonsils and adenoids is a factor in beneficially influencing the mental life of the school child. Not only is the health impaired by failure to remove these diseased parts but the mental life and activity of the child as well.

PUPILS' JUDGMENTS OF THEIR TEACHERS

By Edward William Dolch, Jr.

The opinions that pupils have of their teachers are certainly of value if those opinions are honestly and frankly given. Pupils are, on the whole, fairminded, and they are assuredly not deceived as to the character and effectiveness of those over them. Single individuals are frequently biased, of course, but such bias is not a disturbing factor when a sufficiently large number of judgments are secured. Though every teacher is aware that certain of his pupils are antagonistic and certain ones are overdisposed to be friendly, he is also aware that the whole body of his students, taken together, has a very fair idea of his worth, both as a man and as a teacher.

To get such opinions, the English teacher has an unparalleled opportunity. Through the assignment of theme subjects, he is able to explore at will his pupils' experience and thought. Constantly reviewing, as he is, the content of their minds, why should he not turn this review to account? Think of the mass of material that could be accumulated by a number of teachers over a period of years. Of course the information would have to be secured with some care and with as much scientific method as possible. But if the work were done in the right way, the results would certainly be of value.

The report which follows is a suggestion of what might be done in this line of investigation. It is not a model, as will be noted later, but it is an indication of what might be done on a large scale and with more fully controlled conditions.

Three classes of university freshmen were asked to write a short theme on the subject, "My Best High School Teacher." They were told to use the word "best" just as they would ordinarily use it, and to give their reasons for thinking the teacher best as fully as they could within the limits of about two hundred words. As they had been writing on similar subjects for about two months, expressing their personal views on questions of school life and matters of general concern to students, they took this theme quite as a matter of course and to all appearance felt no hindrance to frank self-expression. Their teacher had at all times put them as much as possible at their ease in discussing personal matters and had encouraged sincerity and directness.

As there were very few girls in the three classes, their papers were not considered. There were left, therefore, 82 reports, all from men. Some had given second and third choices, but, for the sake of consistency, only the first choices were taken into consideration in Table I. Here are shown two points, distribution of choices by sex of teachers mentioned and by subjects taught.

TABLE I

HIGH SCHOOL TEACHERS "LIKED BEST" BY 82 BOYS AS STATED IN UNIVERSITY FRESHMEN ENGLISH THEMES

82 Total	44 Men	38 Women	Subject Taught
21	11	10	Mathematics
16	10	6	Subject not given
15	3	12	English
8	4	4	History
6	6	0	Physics
3	2	1	Chemistry
3	1	2	Science
2	2	0	Civics
2	1	1	Commercial
2	1	1	Modern Language
1	1	..	Manual Training
1	1	..	Agriculture
1	1	0	Biology
1	0	1	Latin

In the first place, the importance of the choices here expressed needs perhaps to be emphasized. Each of the 82 men had had in high school, on the average, at least 10 teachers, so that each had picked out the one he felt to be the "best" teacher of at least 10. Consequently, the 82 teachers mentioned represent, no doubt, a total number of over 800. The thinking which was back of these reports must, therefore, have consisted of a mental review of the work of all of these 800 teachers, or at least of those who were still prominent in their memory. Indeed, the tone and temper of the writing showed a very thoughtful consideration of the matter by practically all of the students.

In Table I, two points at least are of interest. The first is that just about half of the chosen teachers are men and half are women. Other things being equal, we should expect a boy to prefer a man as a teacher. Either that supposition is false, or other things were not equal. That is to say, a greater total proportion of women teachers would have increased the chances of there being strong individuals among them. Or it might be possible that the women were, on the

whole, more adapted to the work and therefore more likely to favorably impress their pupils. The material at hand does not enable us to answer any of these questions.

The second point in Table I is the distribution by subjects taught. Here the clear predominance of Mathematics and English would seem to need an explanation. The one that would first occur is that these are required subjects, or ones required for several years, and that therefore the chances were in their favor. This might be the answer, except for the argument that the other subjects, being electives in most part, should certainly have proven more attractive, if we assume that pupils elect subjects because they have strong interest in them. A sceptical person might discount the English choices since they were reported in English themes, but no such circumstance would account for Mathematics having first place. Nor was the chosen profession of the student a factor here, the engineering freshmen favoring the mathematics teacher no more than the freshmen in agriculture or arts and sciences. If we can find no other explanation, we are forced to assume that because Mathematics and English were subjects required of all, their predominance is due to the greater number of chances in their favor. In that case, the table seems to yield the conclusion that subject taught was not a factor at all, but that the choices were pretty evenly distributed over the whole of the curriculum. That is to say, a forceful and effective teacher will make a lasting impression on a student, no matter what subject he is teaching.

Table II presents another phase of the report, the qualities for which the teacher was singled out as "best." Here we were able to count those teachers who were described as second and third choices, for certainly they also had the qualities that impress students, though perhaps not in the same degree as the teachers mentioned first. This gives us 120 teachers in all, described by these 82 men as having been the "best," or among the "best," they had known in high school. Some difficulty arose, of course, in tabulating the qualities mentioned, but their descriptions were as far as possible preserved in the students' own words. In no case was one student's testimony twisted to fit another's statement. Keeping the students' phraseology gives the list a rather naïve tone, but this very fact furnishes an added interest.

From Table II, one thing is clear. The students took "best" to mean having ability to teach. The phrase used most often, and one from the students' own colloquial speech, was that he or she "knew how to teach." The qualities next in rank are also phases of teaching ability. Personal qualities follow

TABLE II

QUALITIES MENTIONED AS REASONS FOR A TEACHER'S BEING "LIKED BEST"

One Hundred and Twenty Teachers Described by Eighty-two University Freshmen, Some Writing of One, Others of Two, And a Few of Three Persons

Material—English Themes

Times Mentioned	Quality as Described in Themes
69	Knew how to teach
50	Was interested in students
40	Had good discipline
39	Knew the subject
38	Made the work interesting
31	Was good natured
23	Had broad education and interests
20	Was interested in student activities
15	Was fair
11	Was socially popular
10	Had attractive personality
9	Was stern
9	Was practical
9	Had good character
6	Had sense of humor
6	Compelled attention by methods
4	Trusted students

with less numbers, some of those most often thought of by some of us being far down the list.

There is an interesting possibility for an explanation of this predominance of teaching ability. Might it not be that, after a two months' struggle with college work, the students were thinking with gratitude of those high school teachers who had grounded them well in prerequisites and with less regard then formerly of those who had not? There is certainly reason to think that just such a change in point of view would come about with the change from the high school hall to the university campus, yet in the boy who did not go to college, would not increasing maturity bring about much the same change? There might be some comfort in this thought for the high school teachers who feel that adolescence does not sufficiently appreciate good teaching.

The value of any such canvass as this depends, as we have stated, upon the frankness of the opinions expressed. Here it was felt that the students had no motive for a repression of honest opinion and none for the statement of a dishonest one. It is not claimed that these opinions are the same that were held while the boys were still in high school; probably

the change to the university had altered their views. But with which is the high school teacher most concerned, what his pupils think of him while he is teaching them, or what they will think of him in more mature retrospect? Very possibly, not enough statements are represented to show the same result that an investigation of a thousand cases would. Very possibly an investigation of the opinions of women university students would show markedly different results. These are matters for further study and ones that could be easily settled by even a slight co-operation on the part of the English Department of any college or university having a large enrollment. Very possibly, the opinions of high school graduates who go to college would not be entirely the same as those of graduates who do not, or even of those who never graduate. Yet the views of university freshmen should furnish a good indication of those of the whole high school student body.

It remains only to repeat that this study is but a slight attempt in a field that should prove constantly and widely valuable—the investigation of the experience and thought of pupils through their self-expression in English themes.

QUESTIONNAIRE FOR THE OBSERVATION OF A YOUNG CHILD FROM BIRTH TO TWO YEARS OF AGE[1]

Translated by MARTIN L. REYMERT, Iowa State University

The following questionnaire forms a part of a more extensive article by Dr. Simon on the first two years of life in the reference given (in all 64 pp.). The questionnaire is intended for parents, and the different questions are analyzed and explained quite extensively in the accompanying text. As infant psychology is now in vogue in this country, the attempt of Dr. Simon may be of interest. He seems to be aiming at a real rating scale for early infancy.

Name and surname of the child.....
Date of birth.....
Full time birth?.....
Sex .....
Weight at birth.....
Weight at date of examination.....
Condition of teeth at the same date.....
Duration of sleep (in hours) at night.....
Number of awakenings.....from.....to.....
During daytime .....
Previous sicknesses .....
Vocation of the parents.....
Has the child brothers or sisters.....
With whom does it live.....
Age and sex of these.....
Date of examination.....
The examiner's name and address.....
Is the examiner familiar with the child, or not.....
(Degree of relationship; personal acquaintance, friend or stranger)
.....

I. SIGHT

Does the child's look indicate a vague contemplation? (First Day.)
Does it fix its eyes habitually on the ceiling? (First Days.)
Is it possible to bring about a convergence of the eyes upon an object? (Seventh Day.)
Do the child's eyes follow:
(a) A white paper or a lighted match moved slowly before it from one side to another. (Thirtieth Day.)
(b) An object that moves back and forth. (Third Month.)
(c) The deplacement of a person to another place? (Third Month.)
(d) A ball, that is thrown?
(e) The flight of a bird.

[1] By Th. Simon (*Bulletin de la Société Libre Pour L'Etude Psychologique de L'Enfant. Numero* 108. 16 *Annee* (n°2), 1916).

(f) Are the eyes constantly exploring? (Third Month.)
(g) Does it detect a thread? A hair? (Eighth Month.)

AUDITION

Is the child aware of:
The human voice? } (Fifteenth Day.)
A sound? }
Does it turn its head toward a sound, dog or bell? (Third Month.)
Does it search for the one calling it? (Third Month.)

II. RECOGNITION

Does the child respond in a special way:
(a) to the face of the mother? (Third Month.)
(b) to a familiar voice?
(c) Does it manifest joy over the preparations for taking it out? (Fifth Month.)
(d) Does it manifest astonishment:
(a) by seeing itself in a mirror?
(b) before a picture of its parents? (Seventh Month.)
Is its attention fixed?
Does it get curious (eyes and mouth wide open) by a stranger? (Seventh Month.)
Does it turn with curiosity when it hears a door being opened? (Eighth Month.)
Does it examine (with lips pressed together) the object just being grasped? (Ninth and Tenth Month.)
Do the eyes follow an object, which the child drops? (Ninth to Tenth Month.)
Does it observe *acts in series* (the preparation of its meal for instance)? (Twelfth Month.)
Can it pick out among general photographs the photo of a certain relative? (Twelfth Month.)
Does it put out its hands?
Does it try to put pictures, it has seen, together, to make a book? (Twelfth to Eighteenth Month.)
Does it no longer try to take the faces or the figures (which it sees) from a book?

III. AFFECTIVE MANIFESTATIONS

Does the child make grimaces, when its face is touched by a little cold water? (First Days.)
Does it open its eyes with pleasure and spread its fingers apart upon being given a warm bath?
Does it show its joy by timely movements?

Sympathy

Does the child smile back?
Does it laugh audibly? (Eighth Month.)
Does it laugh, when one is laughing near by? (Tenth to Twelfth Month.)

Desire

Does it merely open its eyes and advance its lips? (Seventh Day.)
Does it express its desire by outstretched arms? (Fifth Month.)

Fright

If one approaches one's hand to the child's eyes, in a threatening way, does it raise its arm? (Third Month.)
Does it recognize a grouchy expression in a face? (Does it draw the corner of its mouth or does it start to cry)? (Sixth Month.)

Do its arms tremble at a sudden noise? (Thirtieth Day.)
Does it nearly wink its eyes at a sudden noise? (Eighth Month.)
Does the contact of a feather or a hair make it withdraw its hand? (Eighth Month.)
Is the child afraid of animals that it has never seen before? (Twelfth to Eighteenth Month.)
Is the child afraid of
Black clothing?
Of hands with gloves on?
Of changes in dress?
} (Twelfth to Eighteenth Month.)

IV. Motor Activities

If one touches the lips of the child with the finger, does one get sucking as a response? (First Days.)
Will blowing lightly on the one or the other of the child's eyes call forth the closing of the eye? (First Days.)
If one touches the tip of the nose of the child will the eyes close themselves? (First Days.)
If one touches one of the nostrils, what is the response of the eye at the same side? (First Days.)
Will a light tickling on the sole of the foot provoke the spreading and extension of the toes? (First Days.)
Will a stronger rubbing of the sole, make the child withdraw the whole foot? (First Days.)
Are the movements co-ordinated? (First and following days.)
Do the fingers show slow and indefinite contractions? (First Days.)
Does the child show slow and partial puckering the lips? (First Days.)

Grasp

If one puts a finger in the palm of the child's hand, does it close the hand? (First Days.)
Does the child try to grasp objects presented to it, and if failing, does it seem to renew its efforts? (Fifth Month.)
Does the child try to grasp at the same time, both the object and the base on which it rests? (Seventh to Eighth Month.)
Does the child get hold of the object thrown to it, right away on the first trial? (Ninth and Tenth Month.)
Does it grasp small objects between the thumb and the index finger? (Twelfth Month.)
Can it get a foreign object (a piece of bread, for instance) out of its mouth again (by hand)?

Carriage of the Head

Does the child's head have just a chance balance?
If one puts it erect, for how long a time can the child keep its head erect? (Fourth Month.)

Sitting Position

Does the child raise its head from the pillow? (Third Month.)
Does it succeed in lifting its body in the cradle? (Sixth Month.)
Can the child *sit* with the help of a pillow? (Eighth Month.)
Can it sit without any assistance? (Eleventh Month.)

Walking

Held under the arms, with the feet touching the floor, does it make alternating movements of the feet, crossing one over the other, and placing one foot upon the other?
Or does it place its feet properly while still making exaggerated flexion? (Ninth-Tenth Month.)

Does the child creep around the floor? (Ninth-Tenth Month.)
Can it stand erect for an instant without support? (Eleventh Month.)
Can it raise up, by the help of the nearest support? (Twelfth-Eighteenth Month.)
Does it take several steps if one holds it by the hand?
Can it raise up without support? (Twelfth-Eighteenth Month.)
Does it walk alone?
(a) too quickly with its head leaning forward? (Eighteen Months-Two Years.)
(b) rather slowly, but able to reach the goal? (Ten Months-Two Years.)
Does it climb a step, without aid?

Activities. (Properly so-called).

Does the child imitate the farewell gesture with its entire arm?
Does the child carry things to its mouth without fumbling? (Ninth-Tenth Month.)
Does it amuse itself by banging objects against one another or upon the table or its chair? (Ninth-Tenth Month.)
Does it still drop its toys? (End of First Year.)
Does it occupy itself: (End of First Year.)
By splashing water?
By filling and emptying small boxes?
By putting on a paper hat?
By hiding its ball in play?
Can it put its tongue out at a person? (End of First Year.)
Does it return a hand shake? (Twelfth Month.)
Does the child imitate: (Twelfth-Eighteenth Month.)
Sewing?
Writing?
Crossing the arms?
Coughing?
Sucking?
Reading?
Feeding dolls and animals?
Sweeping?
Brushing?
Does it aid in setting the table? (Twelfth to Eighteenth Month.)
Does it aid in the housekeeping? (Twelfth to Eighteenth Month.)
Can it:
Blow out a candle?
Put a cork in a bottle?
Open and close a door?
Blow on a trumpet?
Draw a string up to him by using both hands alternately?
Put a coin into the opening of a "savings bank?"
Unscrew a cover?
Salute (Bowing)?
Does the child try to dress itself alone?
Does the child try to eat alone with a spoon and how does he manage it? (Eighteen Months to Two Years.)

V. Language	I. *Monologues*
Babbling	"rara-o-go-aggege" (Fifth Month.)
Crowing	"brrr-ha" (Sixth Month.)
Vowels	recognized? When?
Consonants	recognized? When?
Syllables	recognized? When?

II. *Comprehension*

Does the child respond, when its name is called? (Twelfth Month.)
Where is: (Twelfth-Eighteenth Month.)
The head?
The lamp?
The door?
Papa?
Your hat?
Where are papa's eyes? (Eighteen Months to Two Years.)
Where is little sister's (or mama's) hair?
Where is your nose? Where is mine?
Where is your ear? Where is the other?
Cross your arms?
Pick up this or that object.
Fold your napkin.
Give me your drinking glass.
Take the handkerchief which is on the table and put it on the chair.

III. *Repetition*

Say after me: (Eighteen Months to Two Years.)
ma
pa
dada
lolo
painpain
du lait
Un auf
soulier
gateau
citeau
cheval
mouville
pantalon
chocolat

IV. *Language in a narrower sense*

Does the child express its desires by infinitives or substantives? (Eighteen Months to Two Years.)
Does it express its judgment by a single word? (Warm for instance.)
Does it designate animals by the imitation of their cry or by their names?
What is your name? (Eighteen Months to Two Years.))
What is this? (Object shown to is a chair for example.)
What is the use of this?
What does .....?
Do you want.....?
(State if response is yes or no.)

BOOK REVIEW

Quelques Traits de la Vie de Jesus au Point de Vue Psychologique et Psychanalytique. By GEORGES BERGUER. Paris, Atar, 1920.

With the single exception of G. Stanley Hall's two volumes on "Jesus the Christ in the Light of Psychology" Berguer's book on Jesus is the most extensive and important piece of literature in its field. As such, the space devoted to reviewing it may best be utilized in presenting an abstract of the most significant points, without turning aside for critical comment.

In an elaborate introduction, Berguer makes an interesting comparison of the early development of Christianity and of the old mystery cults. Both religions rose in a time of national decadence. The mystery cults had their inception when the power of Greece and Rome was on the wane, and Jewish peoples had passed the zenith of their glory before the Christian religion was formulated. Therefore both Christianity and the ancient mysteries were the product of introverted mental processes. The great men of the time, seeking in vain for a satisfaction of their pride in their nation in external circumstances, were forced to seek solace in the depths of their own thoughts and feelings. This involved an introversion of the libido, which reëmerged to find expression in a new ideal of life, a symbol of their racial aspirations, a wish-fulfillment phantasy to take the place of that which was denied them by reality.

Just as the environmental and psychic background of the Christian faith and the mystery cults was similar, so they passed through like stages in their growth. This is best represented in the successive symbolizations of union with the deity. At the beginning, union with God was conceived as material. Thus, the ancients ate the sacred animal, and the followers of Christ could only receive the Holy Ghost when they felt a "whisper on the wind," as if the very breast of the dead Saviour must penetrate their flesh. Sexual union was a common symbol of divine union in the mystery cults, when these became a kind of nature worship. Traces of this confounding of human love and divine love are found in the Bible, which represents union with God as marriage, and worship of false gods as adultery. The third stage of symbolisms harks back to the "family romance" and visualizes God as the all-father, the creator. This, too, is characteristic of Christianity and the mystery cults, and out of it grows the idea of rebirth, of spiritual regeneration. The idea of the climbing of the soul is universal.

If we apply the psychoanalytic conception of the family romance to the story which throws the glamour of the Virgin birth upon Jesus' life, we shall find that the Christmas legend conforms to the typical myth motives. In the first place, Jesus is elevated from the humble position of the carpenter's son to that of divine parentage, which is always one of the mythical characteristics. In the second place, the universal motive is the announcement of some misfortune which necessitates the abandonment of the child by its illustrious parents. In the Christmas story, this is replaced by the massacre of the innocents ordered by Herod. In the typical myth, the lost child finds his true parents and is restored to his rightful position. In the case of Jesus, he found his divine father with the conviction of his Messianity. This is the interpretation of the Jesus legend interpreted by Freudian principles.

If we apply the method of interpretation worked out by Jung and Silberer, we get a somewhat different conception. Let us consider the conflicting emotions aroused in the folk-soul by the life and death of Jesus. Here was a man who went to a most tragic and ignominious end, but whose personality was the embodiment of the god the people worshipped. Because they had sinned against him, they raised him to the highest possible eminence in atonement. The story of the divine conception was more than a historical fact, it was a psychological verity, the expression of deep emotions. "This man could not have been as other men," said the dream of the folk-soul. "His parents could not have been his real parents. He is not born of man but of God, although he is the son of woman."

The baptism scene is as susceptible to psychoanalysis as the story of Jesus' birth. According to the Freudian method, the dove and the open heavens would be sexual symbols, and the feeling of union with God would be purely a sex sublimation. But although the roots of the symbolism may have been sexual, it had also a teleological, an anagogic aspect. It was indicative of the future life of Jesus and of his spiritual union with the Father. It is the giving of himself up to those inner inclinations of his own soul which he interpreted as the voice of God saying "You are my well beloved son." Herein Jesus freed himself from the thwarting influence of the family complex. His hostility to the father was replaced by confidence in his love. Freed from this, which is one of the chief internal obstacles to a full and free life, Jesus felt himself animated with a dynamic energy of surpassing force. What more natural than that he should interpret this by the voice choosing him from all men, assuring him that he was the long-expected Messiah?

The temptations symbolize the personal temptations of Jesus. To turn the stone into bread would have been to use his Messianity for material advantages. To yield to the suggestion to throw himself from the roof of the temple and let the angels support him was the temptation to become fanatical, to cease to live in touch with reality, to ask God to intervene in the course of natural laws. And the third temptation was the temptation to false and diabolical mysticism, to use the power of his position to become the political master as well as the spiritual guide. To this, too, Jesus replied "Get thee behind me, Satan."

The teaching of Jesus is affirmative because he seeks to have others duplicate the psychic experience through which he has passed, to trust their inner inclinations, to feel themselves an integrated personality, ready for adequate action. By a sort of intuition, he taught this precept to the people in the only language they could have understood,—in the symbolic speech of the parable. The kingdom of heaven of which he spoke was the reign of God in the hearts of men here on earth. It would be first a psychic and later a social state. The kingdom and the Messianity are the symbolic expression of the two great psychic experiences in the life of Jesus.

The miracles of Jesus are no more marvellous than the cures of modern psychotherapy. Jesus cured by suggestion. The sick people had the same doubt alternating with confidence in Jesus that the modern neurotic manifests in the analyst at the time of transference. It was the personality of Jesus that wrought miracles in the minds of his fellowmen.

The critical experience of Jesus' life can be summarized in one word, —*Father*. In receiving into his life the full influx of the elan-vital, the libido, the moral imperative, or whatever you may choose to call

it, Jesus felt himself like the father. Humanity has always to make this transition. The child has always an ambivalent feeling to the father, an emotion of love and hate mingled. To achieve an adult personality, the individual must free himself from the hate of the father, must realize that he is not a thwarting force, but is a being to be only loved and trusted. Jesus accomplished this by raising his father into a being to be worshipped, and in feeling a mystic union with him. He even sacrificed his own life willingly to prove that he was indeed the Son of God, obedient to divine command. His was the sublime sacrifice for adulthood. Yet in thus giving his life he won it as never before, for he felt the deepest satisfaction and freedom of the soul. The supreme pathos was the fact that he died without knowing the incomparable grandeur of his death. He only knew that he was led to this fate by an all-wise and all-loving father. He did not know that his example was necessary for mankind, in order that all humanity might see the necessity for the sacrifice of the hatred of the father, in order to achieve their full possibilities. In his death and resurrection, the inner psychic life of the whole human race was expressed. The Christ legend, birth, death and resurrection, is the exposition of the family romance and of the sacrifice which is rebirth.

Such a meager outline can do no more than to suggest some of the main themes in Berguer's book. The treatment is consistently psychological, and will repay a careful reading.

PHYLLIS BLANCHARD.

BOOK NOTES

French Literature in the Great War. By ALBERT SCHINZ. N. Y., D. Appleton and Co., 1920. 433 p.

The author, who is a professor of French Literature at Smith College, is well qualified—and it is a very high compliment to say so—to deal adequately with his great theme. Just before the outbreak of the war French literature underwent something like a Renaissance, and there was a strong new spirit of devotion and return to medieval and Catholic ideals. This was the background, and it was from this as an inspiration that much of the best literature that appeared during the war and many of the heroic acts had their source. Professor Schinz's book, then, merits attention not merely by students of the French language and literature but by all students of religious or moral phenomena, especially those on a large scale involving not merely individuals but races and nations.

Graphology and the Psychology of Handwriting. By JUNE E. DOWNEY. Balt., Warwick and York, 1919. 142 p.

These studies seek to canvass the possibility of a scientific characterological utilization of handwriting. Their main purpose is one of orientation, preliminary to an attempt to use graphic activity in tests of temperament or character traits, tests which are now in process of standardization. Part I gives a critical comparison of graphological contentions and the outcome of modern scientific investigations of handwriting, while Part II reports a number of experimental studies designed to try out methods of research. Free use is made of the results of other investigations.

Imagination and Its Place in Education. By EDWIN A. KIRKPATRICK. Bost., Ginn & Co., 1920. 214 p.

Science embodies universal truths; literature expresses truth as seen or exemplified by individuals. Neither alone can adequately deal with imagination. Psychology seeks to present what is true of all minds, but in no field are individual variations so great. In Part I the author treats imagination and related activities; in Part II, the imaginative life of children; III, school subjects and the imagination.

Personal Beauty and Racial Betterment. By KNIGHT DUNLAP. St. Louis, C. V. Mosby Co., 1920. 95 p.

The author makes the procreation of children the predominant ideal in marriage, minimizing companionship and other "spiritual" factors. Another feature of this book is that although he calls attention to various manifestations of sex he has no practical reform program to propose. In the first part he discusses the significance of beauty with negative and positive traits, while the second part is devoted to a discussion of its conservation.

The Nursery School. By MARGARET MCMILLAN. N. Y., E. P. Dutton & Co., 1919. 356 p.

This book is written in response to a desire expressed by many for help in the starting of nursery-schools. Hundreds of thousands of children are in dire need of education or nurture during the first

years, and the nursery school, according to the author, has emerged from the experimental stage. Here we have an excellent survey of the whole subject in two parts: I, with chapters on plan of the buildings, garden, reading, writing, dinner hour, etc., for different ages up to seven, while in Part II the training of the teacher is described, dental and clinic training, physical training, hand-work and art teaching, holidays, and many other topics. There are a number of interesting illustrations showing in more detail the possibilities and novelties in this field.

Introductory Psychology for Teachers. By E. K. Strong, Jr. Balt., Warwick and York, 1920. 233 p.

The first part of this book discusses the learning process; the second, individual differences. The last part takes up some physiological aspects of psychology.

The Supervision of Instruction. By Hubert Wilbur Nutt. Bost., Houghton, Mifflin Co., 1920. 277 p.

This book is a discussion and analysis of the elements of the supervisory process and a statement of the technique and professional standards for this work. The author discusses such topics as: The Job of Supervision, Principles Underlying the Supervision of Instruction, Devices of Supervision, Technique, etc.

The Child Under Eight. By E. R. Murray and H. B. Smith. N. Y., Longmans, Green and Co., 1919. 236 p.

The two authors have worked harmoniously though they have not collaborated. Part I, "The Child in the Nursery and Kindergarten," has twelve chapters, with such titles as Joy in Making, Stories, From Fancy to Fact; while Part II, "The Child in the State School," deals with "Things as They Are," Practical Application of Vital Principles, and Consideration of the Aspects of Experience, including the experiences of human conduct, the natural world, mathematical truths, of the life of man, etc. It is a little hard to classify this book to know just where it would fit, what special good it is aimed to accomplish, or even how much real knowledge of childhood these authors, evidently both teachers, have.

Moral and Religious Education. By Sophie Bryant. N. Y., Longmans, Green and Co., 1920. 256 p.

This book is written on the assumption that, in order to secure the best result over the widest area, teaching morality through the development of religious faith, with its direct appeal, is the best way. Young people are especially susceptible to the emotional appeal to religious feeling. Thus, starting with the exposition of the notions of self-liberation by self-realization, the author discusses the moral and religious ideals, while the last part deals with the reasoned presentment of religious truths.

Manual of Directions. By M. E. Haggerty. Yonkers, World Book Co., 1920. 59 p.

This is a pamphlet giving directions how to achieve examinations in reading: Sigma 1, and Intelligence examinations: Delta 1 and Delta 2, with accompanying charts.

The Field of Philosophy. By JOSEPH A. LEIGHTON. Columbus, R. G. Adams and Co., 1919. 485 p.

This is a second revised and enlarged edition. The author tells us that he has long experimented and pondered as to the best method of giving an introductory course and, after much experience, has found one which seems to him satisfactory and which is presented in this book. Part I treats of the chief problems and standpoints of Greek and medieval philosophy and II, those of modern philosophy.

The Teacher's Ideals of Life and Happiness. By WILLIAM HENRY PYLE. Columbia, The Missouri Book Co., 1920. 109 p.

In this book the author aims to help his fellow-teachers to think deeply about the serious concerns of human life. He has been a teacher for twenty-five years and thinks what the teacher most needs is not more theory or method but a wider outlook and deeper convictions concerning the fundamental things of life. So he discusses, in successive chapters, the ideals of literature, work, play, democracy, home and children, art and beauty, and morals and religion.

Spiritual Pluralism. By C. A. RICHARDSON. Cambridge, Univ. Press, 1919. 335 p.

This work is dedicated to James Ward. The author says in his Preface that his main purpose is to present and defend the theory that the texture of the universe is through-and-through spiritual. The form of such a theme, of course, is modified greatly by the teaching of schools of thought that oppose any kind of idealistic interpretation, e. g., the Neo-Realists, whose results in the main, although this author is not entirely in sympathy with them, he admits not wholly incompatible with his own views.